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# West-Central Colorado: Forest Statistics for State and Private Land, 1983

Roger C. Conner
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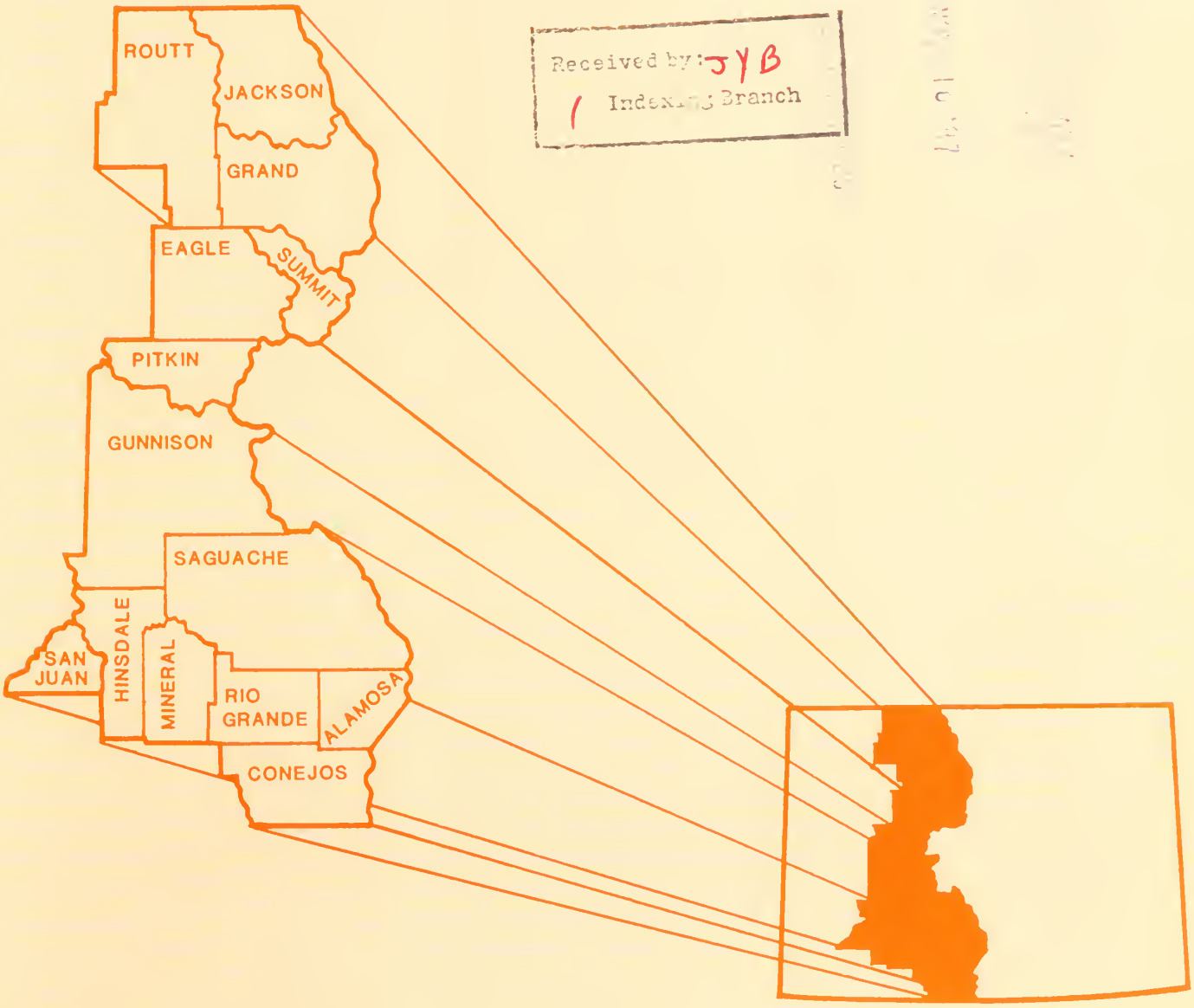

## ACKNOWLEDGMENTS

This report is the result of the combined efforts of numerous people on the Forest Survey staff. In addition to the photo interpretation and field crews, several individuals played key roles in the reduction of basic data into information describing the extent, nature, and condition of the forest resources in Colorado: Dennis Collins supervised the data collection; Sharon Woudenberg and Shirley Waters compiled the data and made summaries; and Velma Inama transformed the data summaries into tables of information. Also, acknowledgment is given to the Colorado State Forest Service for its cooperation and assistance in collecting the inventory data. And we extend a special note of gratitude to the private land owners who allowed the field crews access to the sample locations on their properties.

## RESEARCH SUMMARY

Presents land area, timberland area, woodland area, timber inventory, and growth and mortality data for 14 counties in west-central Colorado. Information and statistical tables are based on Forest Survey data collected from 1982 and 1983 and cover State and private resources.

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# CONTENTS


| | Page |
|---|---|
| Introduction | 1 |
| Highlights | 2 |
| Area | 2 |
| Inventory | 2 |
| Components of Change | 3 |
| How the Inventory Was Conducted | 3 |
| Prefield | 3 |
| Field | 3 |
| Compilation | 3 |
| Data Reliability | 3 |
| Terminology and Data Tables | 3 |
| Terminology | 3 |
| References | 6 |
| Figures | |
| 1. Counties covered by this report | 1 |
| 2. Distribution of land area in west-central Colorado by owner group | 2 |
| Forest Survey Tables | |
| 1. Area of State and privately owned forest land with percent standard error in west-central Colorado, 1983 | 7 |
| 2. Net volume, net annual growth, and annual mortality of growing stock and sawtimber on State and privately owned timberland with percent standard error in west-central Colorado | 7 |
| 3. Total land and water area by ownership class in west-central Colorado, 1983 | 8 |
| 4. Total land area on State and privately owned land by major land class and ownership class in west-central Colorado, 1983 | 9 |
| 5. Area of forest land on State and privately owned land by forest type, ownership class, and land class in west-central Colorado, 1983 | 10 |
| 6. Cubic feet of net volume in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1983 | 10 |

Forest Survey Tables — Page


7. Cubic feet of net annual growth in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1982 . . . . . 11
8. Cubic feet of annual mortality in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1982 . . . . . 11
9. Area of State and privately owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983 . . . . . 12
10. Area of State owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983 . . . . . 14
11. Area of nonindustrial privately owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983 . . . . . 16
12. Area of State and privately owned timberland by stand volume and ownership class in west-central Colorado, 1983 . . . . . 17
13. Area of State and privately owned timberland by forest type and area condition class in west-central Colorado, 1983 . . . . . 18
14. Number of growing-stock trees on State and privately owned timberland by species and diameter class in west-central Colorado, 1983 . . . . . 18
15. Number of cull and salvable dead trees on State and privately owned timberland by ownership class, and softwoods and hardwoods in west-central Colorado, 1983 . . . . . 19
16. Net volume of growing stock on State and privately owned timberland by ownership class, forest type, and stand-size class in west-central Colorado, 1983 . . . . . 20
17. Net volume of sawtimber (International ¼-inch rule) on State and privately owned land by ownership class, forest type, and stand-size class in west-central Colorado, 1983 . . . . . 21
18. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in west-central Colorado, 1983 . . . . . 22
19. Net volume of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1983 . . . 23
20. Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1983 . . . . . 23
21. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1983 . . . . . 24
22. Net volume of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1983 . . . . . 25


Forest Survey Tables — Page


23. Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1983 . . . . . 26
24. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1983 . . . . . 27
25. Net volume of timber on State and privately owned timberland by class of timber, and softwoods and hardwoods in west-central Colorado, 1983 . . . . . 28
26. Net volume of growing stock on State and privately owned timberland by forest type and species in west-central Colorado, 1983 . . . . . 28
27. Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by forest type and species in west-central Colorado, 1983 . . . . . 29
28. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by forest type and species in west-central Colorado, 1983 . . . . . 29
29. Net annual growth of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . . . 30
30. Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . . . 30
31. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . . . 31
32. Net annual growth of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 32
33. Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 33
34. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 34
35. Annual mortality of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . 35
36. Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . . . 35
37. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982 . . . . . 36

Forest Survey Tables — Page

38. Annual mortality of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 36
39. Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 37
40. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982 . . . . . 37
41. Annual mortality of growing stock on State and privately owned timberland by cause of death and species in west-central Colorado, 1982 . . . 38
42. Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by cause of death and species in west-central Colorado, 1982 . . . . . 38
43. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by cause of death and species in west-central Colorado, 1982 . . . . . 39
44. Area of State and privately owned woodland by ownership class and forest type in west-central Colorado, 1983 . . . . . 39
45. Net volume of State and privately owned woodland by ownership class and species in west-central Colorado, 1983 . . . . . 40
46. Net annual growth of State and privately owned woodland by ownership class and species in west-central Colorado, 1982 . . . . . 40
47. Annual mortality of State and privately owned woodland by ownership class and species in west-central Colorado, 1982 . . . . . 40
48. Area of State and privately owned timberland, by county and ownership class in west-central Colorado, 1983 . . . . . 41
49. Net volume of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1983 . . . . . 41

Forest Survey Tables — Page

50. Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1983 . . . . . 42
51. Net volume of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1983 . . . . . 42
52. Net annual growth of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 43
53. Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 43
54. Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 44
55. Annual mortality of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 44
56. Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 45
57. Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982 . . . . . 45
58. Area of State and privately owned woodland by county and ownership class in west-central Colorado, 1983 . . . . . 46
59. Net volume of State and privately owned woodland by county and ownership class in west-central Colorado, 1983 . . . . . 46
60. Net annual growth of State and privately owned woodland by county and ownership class in west-central Colorado, 1982 . . . . . 47
61. Annual mortality of State and privately owned woodland by county and ownership class in west-central Colorado, 1982 . . . . . 47

# West-Central Colorado: Forest Statistics for State and Private Land, 1983

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## INTRODUCTION

This resource bulletin reports the findings of the Forest Survey inventory of a sample area defined as State and private lands in Alamosa, Conejos, Eagle, Grand, Gunnison, Hinsdale, Jackson, Mineral, Pitkin, Rio Grande, Routt, Saguache, San Juan, and Summit Counties in west-central Colorado (fig. 1). The two-phase survey began with prefield work in June 1981. The field phase involved, in whole or in part, successive summers from 1981 to 1984 with the bulk of the data collected in 1982.

The data in this report pertain only to the State and private forest resources of the counties listed above. Data for lands administered by various public agencies such as National Forest Systems and Bureau of Land Management will be included in a subsequent, comprehensive statewide

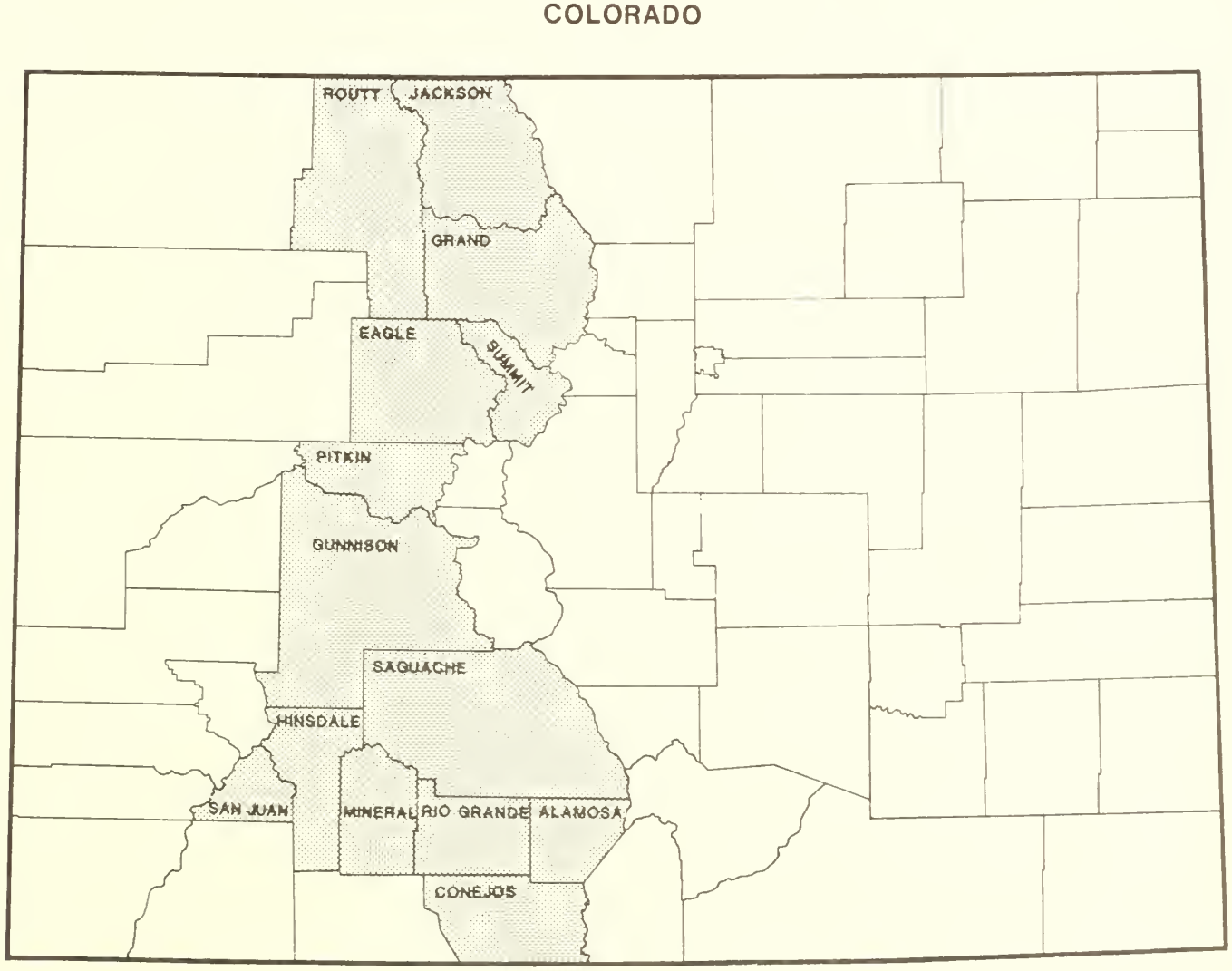


Figure 1—Counties covered by this report.

report that will include all lands and all owners.

The primary objective of Forest Survey—a continuing, nationwide undertaking of the Forest Service, U.S. Department of Agriculture—is to provide an assessment of the renewable resources for forest and rangelands of the Nation. Fundamental to the accomplishment of the objective are the periodic State-by-State resource inventories. Originally, Forest Survey was authorized by the McSweeney-McNary Act of 1928. The current authorization is through the Renewable Resources Research Act of 1978.

The Intermountain Research Station with headquarters in Ogden, UT, conducts the forest resource inventories for the Rocky Mountain States of Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, western South Dakota, Utah, Wyoming, western Texas, and Oklahoma's Panhandle. These inventories provide information on the extent and condition of State and privately owned forest lands and most other lands not in the National Forest System, volume of timber, and rates of timber growth, removals, and mortality.

These data, when combined with similar information on National Forest lands, provide a basis for forming forest policies and programs and for the orderly development and use of the resources.

# HIGHLIGHTS

## Area

- State and private land accounts for 4.3 million acres, 32 percent of the total land area in west-central Colorado (fig. 2).
- Over 1 million acres of this area (24 percent) is considered forest land.
- Of the forest land, 805,000 acres (79 percent) are classified as timberland, 86 percent of which is privately owned.
- Over 217,000 acres are classified as woodland and 88 percent of this is privately owned.
- Aspen forest type occupies nearly 46 percent of the timberland area, while lodgepole pine (22 percent), spruce/subalpine fir (11 percent), and Douglas-fir (9 percent) add another 42 percent.
- Oak is the predominant forest type on woodland and occupies over 149,000 acres, nearly 69 percent of the area.

## Inventory

- Timberland growing-stock volume is nearly 1.4 billion cubic feet, and sawtimber volume totals almost 3.4 billion board feet (International ¼-inch rule).
- Aspen species accounts for nearly 39 percent (538 million cubic feet) of the timberland net volume, with lodgepole pine (30 percent), Engelmann spruce (13 percent), and subalpine fir (10 percent) adding to the remaining percentage.
- Over 85 percent of the timberland growing-stock volume is privately owned.
- Woodland volume amounts to over 80 million cubic feet, 87 percent of which is on private land.
- About 92 percent of the timberland growing-stock volume is in trees less than 17 inches diameter at breast height (d.b.h).
- Nearly 90 percent of the sawtimber volume is in trees less than 19 inches d.b.h.

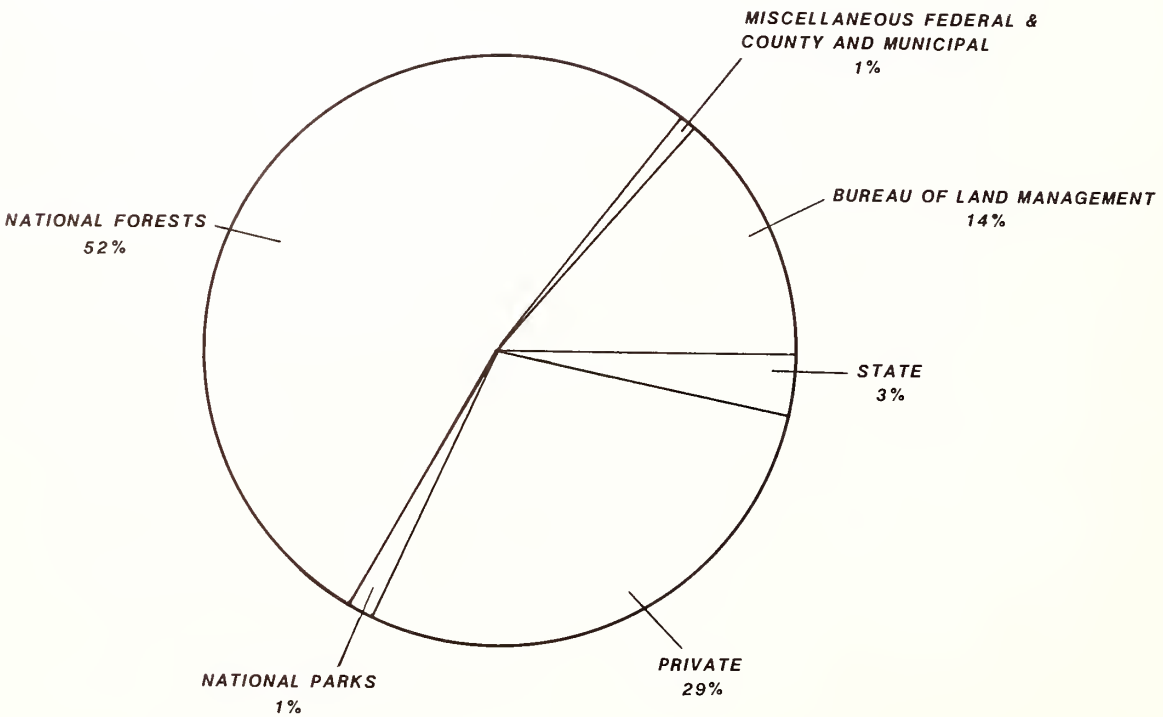


Figure 2—Distribution of land area in west-central Colorado by owner group.

- Over 54 percent of the timberland area is capable of producing more than 50 cubic feet of wood per acre per year. However, average growth for 1982 was about 34 cubic feet per acre per year.
- The volume in cull and salvable dead trees totals 106 million cubic feet for timberland, and only 6 percent of this volume is in rotten cull trees.
- Less than 7 percent of the timberland area is considered medium to fully stocked with desirable trees, and over 3 percent of the area (27,000 acres) is nonstocked.
- About 22 percent of the timberland growing-stock volume and 31 percent of the woodland volume is in Routt County.

## Components of Change

### Growth

- Timberland net annual growth was 27.4 million cubic feet in 1982, and sawtimber growth totaled 103 million board feet (International ¼-inch rule).
- Subalpine fir and lodgepole pine combined account for 33 percent of the sawtimber net growth.
- Woodland net annual growth was 1.7 million cubic feet in 1982, of which 77 percent was accounted for by hardwoods.
- Of the timberland net growth 86 percent is on private land, as is 89 percent of the woodland net growth.

### Mortality

- Annual mortality on timberland of 5 million cubic feet offsets 16 percent of the gross annual growth.
- Lodgepole pine accounts for nearly 50 percent of the annual sawtimber mortality (International ¼-inch rule).

### Removals

- Total industrial roundwood harvest was nearly 9.4 million cubic feet in 1982, about 11 percent of which came from State and private land (McLain and Booth 1985).
- Spruce and lodgepole pine combined account for over 85 percent of the harvest, amounting to nearly 8 million cubic feet (includes all land owners in the sample area).
- Sawlogs accounted for 93 percent of the industrial roundwood volume harvested (includes all land owners in the sample area).
- Of the industrial roundwood removed from State and private land, 37 percent was from Jackson County.
- Over 106,000 cords of fuelwood (8.5 million cubic feet) were harvested in 1982, about 46 percent of which came from State and private land.
- Lodgepole pine accounted for nearly 38 percent of the fuelwood harvest, with ponderosa pine (22 percent), aspen (18 percent), and pinyon (14 percent) adding to the remaining percentage (includes all land owners in the sample area).
- Routt County accounted for more than 56 percent of the fuelwood harvest and 28 percent of the fuelwood volume harvested from State and private land.
- Over 47,000 cords of fuelwood (99 percent) harvested from State and private land were from dead trees (McLain 1985).

# HOW THE INVENTORY WAS CONDUCTED

The inventory was designed to provide reliable statistics at the State and sample area levels.

## Prefield

Primary area estimates were based on the classification of 54,106 sample points systematically placed on the latest aerial photographs available. The photo points, adjusted to meet known land areas, were used to stratify and compute area expansion factors for the field sample data.

## Field

Land classification and estimates for timber characteristics and volume were based on observations or measurements or both recorded at 939 ground sample locations, of which 410 were forested. Sample trees were selected using a 5-point sample cluster, which included 1/300-acre fixed radius plots for trees less than 5 inches d.b.h., and 40 basal area factor variable radius plots for trees 5 inches d.b.h. or larger.

## Compilation

All photo and field data were loaded onto tape and stored for computer editing, computation, and tabulation. Final estimates from these data were based on statistical summaries, a portion of which is included in this bulletin. Volume and defect were computed using equations developed by Edminster and others (1980, 1981), Kemp (1958), Chojnacky (1985), Meyers (1964), and Meyers and others (1972).

# DATA RELIABILITY

Individual cells within tables should be used with caution. Some are based on small sample sizes resulting in high sampling errors. The standard error percentages shown in tables 1 and 2 were calculated at the 67 percent confidence level.

# TERMINOLOGY AND DATA TABLES

The following section contains definitions that are relevant to the timber resource data in this bulletin. Forest area and timber resource data for west-central Colorado are displayed in tables 3 through 61.

# TERMINOLOGY

*Acceptable trees*—Growing-stock trees meeting specified standards of size and quality, but not qualifying as desirable trees.

*Area condition class*—A classification of timberland reflecting the degree to which the site is being utilized by growing-stock trees and other conditions affecting current and prospective timber growth (see Stocking):

Class 10—Areas fully stocked with desirable trees and not overstocked.

Class 20—Areas fully stocked with desirable trees but overstocked with all live trees.
Class 30—Areas medium to fully stocked with desirable trees and with less than 30 percent of the area controlled by other trees, or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.
Class 40—Areas medium to fully stocked with desirable trees and with 30 percent or more of the area controlled by other trees, or conditions that ordinarily prevent occupancy by desirable trees, or both.
Class 50—Areas poorly stocked with desirable trees but fully stocked with growing-stock trees.
Class 60—Areas poorly stocked with desirable trees but with medium to full stocking of growing-stock trees.
Class 70—Areas nonstocked or poorly stocked with desirable trees and poorly stocked with growing-stock trees.
Class 80—Low-risk old-growth stands.
Class 90—High-risk old-growth stands.
Nonstocked—Areas less than 10 percent stocked with growing-stock trees.

*Basal area*—The cross-sectional area of a tree expressed in square feet. For timber species the calculation is based on diameter at breast height (d.b.h.); for woodland species it is based on diameter at root collar (d.r.c.).

*Cord*—A pile of stacked wood equivalent to 128 cubic feet of wood and air space having standard dimensions of 4 by 4 by 8 feet.

*Cull trees*—Live trees that are unmerchantable now or prospectively (see Rough trees and Rotten trees).

*Cull volume*—Portions of a tree's volume that are not usable for wood products because of rot, form, missing material, or other cubic-foot defect. Form and sound defects include severe sweep and crook, forks, extreme form reduction, large deformities, and dead material.

*Deferred forest land*—Forest lands within the National Forest System that are under study for possible inclusion in the Wilderness System.

*Desirable trees*—Growing-stock trees (1) having no serious defect in quality to limit present or prospective use for timber products, (2) of relatively high vigor, and (3) containing no pathogens that may result in death or serious deterioration within the next decade.

*Diameter at breast height (d.b.h.)*—Diameter of the stem measured at 4.5 feet above the ground.

*Diameter at root collar (d.r.c.)*—Diameter equivalent at the point nearest the ground line that represents the basal area of the tree stem or stems.

*Diameter classes*—Tree diameters, either d.b.h. or d.r.c., grouped into 2-inch classes labeled by the midpoint of the class.

*Farmer-owned lands*—Lands owned by a person who operates a farm and who either does the work or directly supervises the work.

*Forest industry lands*—Lands owned by companies or individuals operating a primary wood-processing plant.

*Forest land*—Land at least 10 percent stocked by forest trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width at least 120 feet wide to qualify as forest land. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if less than 120 feet wide.

*Forest trees*—Woody plants having a well-developed stem or stems, usually more than 12 feet in height at maturity, with a generally well-defined crown.

*Forest type*—A classification of forest land based upon and named for the tree species presently forming a plurality of live-tree stocking.

*Growing-stock trees*—Live sawtimber trees, poletimber trees, saplings, and seedlings of timber species meeting specified standards of quality and vigor; excludes cull trees.

*Growing-stock volume*—Net cubic-foot volume in live growing-stock trees from a 1-foot stump to a minimum 4-inch top (of central stem) outside bark or to the point where the central stem breaks into limbs.

*Growth*—See definition for Net annual growth.

*Hardwood trees*—Dicotyledonous trees, usually broad-leaved and deciduous.

*High-risk old-growth stands*—Timber stands over 100 years old in which the majority of the trees are not expected to survive more than 10 years.

*Indian lands*—Indian lands held in trust by the Federal Government.

*Industrial wood*—All commercial roundwood products except fuelwood.

*Land area*—The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and river flood plains, streams, sloughs, estuaries, and canals less than 120 feet wide; and lakes, reservoirs, and ponds less than 1 acre in size.

*Logging residues*—The unused portions of growing-stock trees cut or killed by logging.

*Low-risk old-growth stands*—Timber stands over 100 years old in which the majority of the trees are expected to survive more than 10 years.

*Miscellaneous Federal lands*—Lands administered by Federal agencies other than the Forest Service, U.S. Department of Agriculture, or Bureau of Land Management, U.S. Department of the Interior.

*Mortality*—The net volume of growing-stock trees that have died from natural causes during a specified period.

*National Forest lands*—Public lands administered by the Forest Service, U.S. Department of Agriculture.

*National Resource lands*—Public lands administered by the Bureau of Land Management, U.S. Department of the Interior.

*Net annual growth*—The net average annual increase in the volume of trees during a specified period.

*Net volume in board feet*—The gross board-foot volume in the sawlog portion of growing-stock trees, less deductions for cull volume.

*Net volume in cubic feet*—Gross cubic-foot volume in the merchantable portion of trees less deductions for cull volume. For timber species, volume is computed for the merchantable stem from a 1-foot stump to a minimum 4-inch top diameter outside bark, or to the point where the central stem breaks into limbs. For woodland species, volume is computed outside bark (o.b.) for all woody material above d.r.c. that is larger than 1.5 inches in diameter (o.b.).

*Nonforest land*—Land that does not currently qualify as forest land.

*Nonindustrial private*—All private ownerships except forest industry.

*Nonstocked areas*—Forest land less than 10 percent stocked with live trees.

*Old-growth stands*—Stands of timber species over 100 years old.

*Other private land*—Privately owned land other than forest industry or farmer-owned.

*Other public land*—Public land administered by agencies other than the Forest Service, U.S. Department of Agriculture.

*Other removals*—The net volume of growing-stock trees removed from the inventory by cultural operations such as timber-stand improvement, by land clearing, and by changes in land use such as a shift to wilderness.

*Poletimber stands*—Stands at least 10 percent stocked with growing-stock trees, in which half or more of the stocking is sawtimber or poletimber trees or both, with poletimber stocking exceeding that of sawtimber (see definition for Stocking).

*Poletimber trees*—Live trees of timber species at least 5 inches d.b.h. but smaller than sawtimber size.

*Potential growth*—The average net annual cubic-foot growth per acre at culmination of mean annual growth attainable in fully stocked natural stands.

*Primary wood-processing plants*—Plants using roundwood products such as sawlogs, pulpwood bolts, veneer logs, etc.

*Productivity class*—A classification of forest land in terms of potential growth.

*Removals*—The net volume of growing-stock trees removed from the inventory by harvesting, cultural operations, land clearings, or changes in land use.

*Reserved forest land*—Forest land withdrawn from tree utilization through statute or administrative designation.

*Residues*:

Coarse residues—Plant residues suitable for chipping, such as slabs, edgings, and ends.

Fine residues—Plant residues not suitable for chipping, such as sawdust, shavings, and veneer clippings.

Plant residues—Wood materials from primary manufacturing plants that are not used for any product.

*Rotten tree*—A live poletimber or sawtimber tree with more than 67 percent of its total volume cull (cubic-foot) and with more than half of the cull volume attributable to rotten or missing material.

*Rough tree*—A live poletimber or sawtimber tree with more than 67 percent of its total volume cull (cubic-foot) and with less than half of the cull volume attributable to rotten or missing material.

*Roundwood*—Logs, bolts, or other round sections cut from trees.

*Salvable dead trees*—Standing or down dead trees that are currently merchantable by regional standards.

*Saplings*—Live trees of timber species 1 to 4.9 inches d.b.h., or woodland species 1 to 2.9 inches d.r.c.

*Sapling and seedling stands*—Timberland stands at least 10 percent stocked on which more than half of the stocking is saplings or seedlings or both.

*Sawlog portion*—That part of the bole of sawtimber trees between a 1-foot stump and the sawlog top.

*Sawlog top*—The point on the bole of sawtimber trees above which a sawlog cannot be produced. The minimum sawlog top is 7 inches diameter o.b. for softwoods, and 9 inches diameter o.b. for hardwoods.

*Sawtimber stands*—Stands at least 10 percent stocked with growing-stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

*Sawtimber trees*—Live trees of timber species meeting regional size and defect specifications. Softwood trees must be at least 9 inches d.b.h. and hardwood trees 11 inches d.b.h.

*Sawtimber volume*—Net volume in board feet of the sawlog portion of live sawtimber trees.

*Seedlings*—Established live trees of timber species less than 1 inch d.b.h. or woodland species less than 1 inch d.r.c.

*Softwood trees*—Monocotyledonous trees, usually evergreen, having needle or scalelike leaves.

*Standard error*—An expression of the degree of confidence that can be placed on an estimated total or average obtained by statistical sampling methods. Standard errors do not include technique errors that could occur in photo classification of areas, field measurements, or compilation of data.

*Stand-size classes*—A classification of forest land based on the predominant size of trees present (see Sawtimber stands, Poletimber stands, and Sapling and seedling stands).

*State, county, and municipal lands*—Lands administered by States, counties, or local public agencies, or lands leased by these governmental units for more than 50 years.

*Stocking*—An expression of the extent to which growing space is effectively utilized by present or potential growing-stock trees of timber species. Percentage stocking is the ratio of actual stocking to full stocking for comparable sites and stands, using basal area as the basis for comparison.

*Timberland*—Forest land where timber species make up at least 10 percent stocking.

*Timber species*—Tree species traditionally used for industrial wood products. In the Rocky Mountain States, these include aspen and cottonwood hardwood species and all softwood species except pinyon and juniper.

*Timber stand improvement*—Treatments such as thinning, pruning, release cutting, girdling, weeding, or poisoning of unwanted trees aimed at improving growing conditions for the remaining trees.

*Upper-stem portion*—That part of the main stem or fork of sawtimber trees above the sawlog top to a minimum top diameter of 4 inches o.b. or to the point where the main stem or fork breaks into limbs.

*Water*—Streams, sloughs, estuaries, and canals more than 120 feet wide, and lakes, reservoirs, and ponds more than 1 acre in size at mean high water level.

*Wilderness*—An area of undeveloped land currently included in the Wilderness System, managed so as to preserve its natural conditions and retain its primeval character and influence.

*Woodland*—Forest land where timber species make up less than 10 percent stocking.

*Woodland species dead volume*—Net volume of dead woodland trees and dead net volume portion of live woodland tree species.

*Woodland species live volume*—Net cubic-foot volume in live woodland tree species.

*Woodland species*—Tree species not usually converted into industrial wood products. Common uses are fuelwood, fenceposts, and Christmas trees.

## REFERENCES


Chojnacky, David C. 1985. Pinyon-juniper volume equations for the central Rocky Mountain States. Res. Pap. INT-339. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 27 p.

Edminster, Carleton B.; Mowrer, H. Todd; Hinds, Thomas E. 1981. Volume tables and point-sampling factors for aspen in Colorado. Res. Pap. RM-232. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 16 p.

Edminster, Carleton B.; Beeson, Robert T.; Metcalf, Gary E. 1980. Volume tables and point-sampling factors for ponderosa pine in the Front Range of Colorado. Res. Pap. RM-218. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 14 p.

Kemp, Paul D. 1958. Volume tables. Unpublished report on file at: U.S. Department of Agriculture, Forest Service, Intermountain Research Station, Ogden, UT.

McLain, William H. 1985. Colorado's industrial roundwood production and mill residues, 1982. Resour. Bull. INT-35. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 13 p.

McLain, William H.; Booth, Gordon D. 1985. Colorado's 1982 fuelwood harvest. Resour. Bull. INT-36. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 11 p.

Meyers, Clifford A. 1964. Volume tables and point-sampling factors for lodgepole pine in Colorado and Wyoming. Res. Pap. RM-6. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 16 p.

Meyers, Clifford A.; Edminster, Carleton B. 1972. Volume tables and point-sampling factors for Engelmann spruce in Colorado and Wyoming. Res. Pap. RM-95. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 23 p.

# FOREST SURVEY TABLES

Table 1.--Area of State and privately owned forest land with percent standard error in west-central Colorado, 1983

| Item | Softwoods | | Hardwoods | | All types | |
|---|---|---|---|---|---|---|
| | Acres | Percent standard error | Acres | Percent standard error | Acres | Percent standard error |
| Timberland | 404,837 | ± 6.4 | 399,728 | ± 7.8 | 804,565 | ± 3.8 |
| Woodland | 67,706 | ±20.2 | 148,881 | ±16.1 | 216,587 | ±12.7 |
| Reserved forest land:[1] | | | | | | |
| Timberland | 688 | | -- | | 688 | |
| Woodland | -- | | 502 | | 502 | |
| Total forest land | 473,231 | | 549,111 | | 1,022,342 | |

[1]Reserved land areas are estimated from aerial photos without field verification; therefore, standard errors are not calculated.

Table 2.--Net volume, net annual growth, and annual mortality of growing stock and sawtimber on State and privately owned timberland with percent standard error in west-central Colorado

| Item | Softwoods | | Hardwoods | | All species | |
|---|---|---|---|---|---|---|
| | Volume | Percent standard error | Volume | Percent standard error | Volume | Percent standard error |
| Net volume, 1983: | | | | | | |
| Growing stock (M cubic feet) | 827,277 | ± 9.3 | 556,014 | ±10.5 | 1,383,291 | ± 7.0 |
| Sawtimber[1] (M board feet) | 2,628,550 | ±10.0 | 755,764 | ±16.4 | 3,384,314 | ± 8.8 |
| Sawtimber[2] (M board feet) | 2,231,811 | ±10.0 | 643,579 | ±16.3 | 2,875,390 | ± 8.8 |
| Net annual growth, 1982: | | | | | | |
| Growing stock (M cubic feet) | 14,169 | ±13.6 | 13,255 | ±14.0 | 27,424 | ±10.3 |
| Sawtimber[1] (M board feet) | 60,476 | ±19.5 | 42,787 | ±37.7 | 103,263 | ±20.6 |
| Sawtimber[2] (M board feet) | 51,642 | ±19.9 | 36,838 | ±37.7 | 88,480 | ±20.8 |
| Annual mortality, 1982: | | | | | | |
| Growing stock (M cubic feet) | 2,439 | ±28.8 | 2,589 | ±32.8 | 5,028 | ±24.4 |
| Sawtimber[1] (M board feet) | 10,150 | ±33.7 | 3,158 | ±59.4 | 13,308 | ±33.5 |
| Sawtimber[2] (M board feet) | 8,543 | ±33.6 | 2,684 | ±59.4 | 11,227 | ±33.3 |

[1]International ¼-inch rule.

[2]Scribner rule.

Table 3.--Total land and water area by ownership class in west-central Colorado, 1983

| Ownership class | Area |
|---|---|
| | - - Acres - - |
| Land: | |
| Public: | |
| National Forest | 6,967,512 |
| National Parks[1] | 164,038 |
| Other: | |
| Bureau of Land Management | 1,865,495 |
| Miscellaneous federal | 44,964 |
| State | 404,068 |
| County and municipal | 9,881 |
| Total other public | 2,324,408 |
| Total public | 9,455,958 |
| Private | 3,857,661 |
| Total land area | 13,313,619 |
| Census water | 56,646 |
| Total land and water[2] | 13,370,265 |

[1]Not included with miscellaneous Federal, a component of other public, for purpose of clarity.

[2]U.S. Bureau of the Census, land and water area of the United States, 1980.

Table 4.--Total land area on State and privately owned land by major land class and ownership class in west-central Colorado, 1983

| Land class | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | |
| Timberland: | | | |
| Reserved | 688 | -- | 688 |
| Nonreserved | 115,024 | 689,541 | 804,565 |
| Total | 115,712 | 689,541 | 805,253 |
| Woodland: | | | |
| Reserved | 502 | -- | 502 |
| Nonreserved | 25,317 | 191,270 | 216,587 |
| Total | 25,819 | 191,270 | 217,089 |
| Total forest land: | | | |
| Reserved | 1,190 | -- | 1,190 |
| Nonreserved | 140,341 | 880,811 | 1,021,152 |
| Total | 141,531 | 880,811 | 1,022,342 |
| Nonforest land | 262,537 | 2,976,850 | 3,239,387 |
| Total land area | 404,068 | 3,857,661 | 4,261,729 |

Table 5.--Area of forest land on State and privately owned land by forest type, ownership class, and land class in west-central Colorado, 1983

| Forest type | Ownership class and land class | | | | | | |
|---|---|---|---|---|---|---|---|
| | State | | Nonindustrial private | | All owners | | |
| | Reserved | Nonreserved | Reserved | Nonreserved | Reserved | Nonreserved | Total |
| | - - - - - - - - - - - - - - - - - - - - Acres - - - - - - - - - - - - - - - - - - - - | | | | | | |
| Douglas-fir | 502 | 5,448 | -- | 64,617 | 502 | 70,065 | 70,567 |
| Ponderosa pine | -- | 1,327 | -- | 15,033 | -- | 16,360 | 16,360 |
| Lodgepole pine | -- | 39,178 | -- | 135,451 | -- | 174,629 | 174,629 |
| Limber pine | -- | 1,732 | -- | 5,427 | -- | 7,159 | 7,159 |
| Spruce subalpine-fir | -- | 14,271 | -- | 71,313 | -- | 85,584 | 85,584 |
| White fir | -- | 2,191 | -- | 6,575 | -- | 8,766 | 8,766 |
| Spruce | 186 | 7,955 | -- | 34,319 | 186 | 42,274 | 42,460 |
| Aspen | -- | 42,258 | -- | 327,450 | -- | 369,708 | 369,708 |
| Cottonwood | -- | 664 | -- | 29,356 | -- | 30,020 | 30,020 |
| Total timberland | 688 | 115,024 | -- | 689,541 | 688 | 804,565 | 805,253 |
| Pinyon-juniper | -- | 8,833 | -- | 47,288 | -- | 56,121 | 56,121 |
| Juniper | -- | 1,016 | -- | 10,569 | -- | 11,585 | 11,585 |
| Oak | 502 | 15,468 | -- | 133,413 | 502 | 148,881 | 149,383 |
| Total woodland | 502 | 25,317 | -- | 191,270 | 502 | 216,587 | 217,089 |
| Total all types | 1,190 | 140,341 | -- | 880,811 | 1,190 | 1,021,152 | 1,022,342 |

Table 6.--Cubic feet of net volume in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1983

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Douglas-fir | 7,997 | 81,349 | 89,346 |
| Ponderosa pine | 167 | 2,037 | 2,204 |
| Lodgepole pine | 85,500 | 322,252 | 407,752 |
| Limber pine | 894 | 4,032 | 4,926 |
| Subalpine fir | 17,338 | 114,828 | 132,166 |
| White fir | 2,509 | 8,797 | 11,306 |
| Engelmann spruce | 32,463 | 147,114 | 179,577 |
| Aspen | 57,049 | 485,108 | 542,157 |
| Cottonwood | 495 | 17,973 | 18,468 |
| Total timberland species | 204,412 | 1,183,490 | 1,387,902 |
| Pinyon/juniper | 6,603 | 40,853 | 47,456 |
| Woodland hardwoods | 4,451 | 34,769 | 39,220 |
| Total woodland species | 11,054 | 75,622 | 86,676 |
| Total all species | 215,466 | 1,259,112 | 1,474,578 |

Table 7.--Cubic feet of net annual growth in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1982

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Douglas-fir | 194 | 1,768 | 1,962 |
| Ponderosa pine | 1 | 16 | 17 |
| Lodgepole pine | 1,599 | 5,418 | 7,017 |
| Limber pine | 9 | 39 | 48 |
| Subalpine fir | 297 | 1,671 | 1,968 |
| White fir | 40 | 136 | 176 |
| Engelmann spruce | 469 | 2,512 | 2,981 |
| Aspen | 1,311 | 11,530 | 12,841 |
| Cottonwood | 17 | 522 | 539 |
| Total timberland species | 3,937 | 23,612 | 27,549 |
| Pinyon/juniper | 47 | 307 | 354 |
| Woodland hardwoods | 144 | 1,177 | 1,321 |
| Total woodland species | 191 | 1,484 | 1,675 |
| Total all species | 4,128 | 25,096 | 29,224 |

Table 8.--Cubic feet of annual mortality in trees on State and privately owned forest land by species and ownership class in west-central Colorado, 1982

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Lodgepole pine | 205 | 1,290 | 1,495 |
| Subalpine fir | 109 | 602 | 711 |
| White fir | 41 | 124 | 165 |
| Engelmann spruce | 5 | 63 | 68 |
| Aspen | 243 | 2,354 | 2,597 |
| Total timberland species | 603 | 4,433 | 5,036 |
| Woodland hardwoods | 1 | 8 | 9 |
| Total woodland species | 1 | 8 | 9 |
| Total all species | 604 | 4,441 | 5,045 |

Table 9.--Area of State and privately owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983

| Forest type and stand-size class | Productivity class | | | | Total acres |
|---|---|---|---|---|---|
| | 85-119 | 50-84 | 20-49 | 0-19 | |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | | | |
| Douglas-fir: | | | | | |
| Sawtimber | -- | 20,617 | 37,108 | -- | 57,725 |
| Poletimber | -- | 4,239 | -- | -- | 4,239 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 8,101 | -- | 8,101 |
| Total | -- | 24,856 | 45,209 | -- | 70,065 |
| Ponderosa pine: | | | | | |
| Sawtimber | -- | -- | 3,862 | -- | 3,862 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 12,498 | -- | 12,498 |
| Total | -- | -- | 16,360 | -- | 16,360 |
| Lodgepole pine: | | | | | |
| Sawtimber | 7,152 | 60,874 | 32,484 | -- | 100,510 |
| Poletimber | 8,188 | 7,160 | 42,854 | -- | 58,202 |
| Sapling and seedling | -- | -- | 15,917 | -- | 15,917 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 15,340 | 68,034 | 91,255 | -- | 174,629 |
| Limber pine: | | | | | |
| Sawtimber | -- | -- | -- | 7,159 | 7,159 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | 7,159 | 7,159 |
| Spruce-subalpine fir: | | | | | |
| Sawtimber | -- | 29,559 | 14,875 | -- | 44,434 |
| Poletimber | -- | 12,050 | 7,152 | -- | 19,202 |
| Sapling and seedling | -- | 14,796 | 7,152 | -- | 21,948 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 56,405 | 29,179 | -- | 85,584 |

(con.)

Table 9. (con.)

| Forest type and stand-size class | Productivity class | | | | Total acres |
|---|---|---|---|---|---|
| | 85-119 | 50-84 | 20-49 | 0-19 | |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | | | |
| White fir: | | | | | |
| Sawtimber | 8,766 | -- | -- | -- | 8,766 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 8,766 | -- | -- | -- | 8,766 |
| Spruce: | | | | | |
| Sawtimber | -- | 19,870 | 15,253 | 7,151 | 42,274 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 19,870 | 15,253 | 7,151 | 42,274 |
| Aspen: | | | | | |
| Sawtimber | 26,155 | 23,351 | 5,413 | -- | 54,919 |
| Poletimber | 12,572 | 123,458 | 122,821 | 16,648 | 275,499 |
| Sapling and seedling | -- | 20,469 | 12,572 | -- | 33,041 |
| Nonstocked | -- | 6,249 | -- | -- | 6,249 |
| Total | 38,727 | 173,527 | 140,806 | 16,648 | 369,708 |
| Cottonwood: | | | | | |
| Sawtimber | -- | 23,989 | -- | -- | 23,989 |
| Poletimber | -- | 6,031 | -- | -- | 6,031 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 30,020 | -- | -- | 30,020 |
| All types: | | | | | |
| Sawtimber | 42,073 | 178,260 | 108,995 | 14,310 | 343,638 |
| Poletimber | 20,760 | 152,938 | 172,827 | 16,648 | 363,173 |
| Sapling and seedling | -- | 35,265 | 35,641 | -- | 70,906 |
| Nonstocked | -- | 6,249 | 20,599 | -- | 26,848 |
| Total | 62,833 | 372,712 | 338,062 | 30,958 | 804,565 |

Table 10.--Area of State owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983

| Forest type and stand-size class | Productivity class | | | | Total acres |
|---|---|---|---|---|---|
| | 85-119 | 50-84 | 20-49 | 0-19 | |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | | | |
| Douglas-fir: | | | | | |
| Sawtimber | -- | 1,660 | 2,852 | -- | 4,512 |
| Poletimber | -- | 299 | -- | -- | 299 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 637 | -- | 637 |
| Total | -- | 1,959 | 3,489 | -- | 5,448 |
| Ponderosa pine: | | | | | |
| Sawtimber | -- | -- | 339 | -- | 339 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 988 | -- | 988 |
| Total | -- | -- | 1,327 | -- | 1,327 |
| Lodgepole pine: | | | | | |
| Sawtimber | 2,140 | 11,475 | 8,085 | -- | 21,700 |
| Poletimber | 681 | 1,733 | 10,733 | -- | 13,147 |
| Sapling and seedling | -- | -- | 4,331 | -- | 4,331 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 2,821 | 13,208 | 23,149 | -- | 39,178 |
| Limber pine: | | | | | |
| Sawtimber | -- | -- | -- | 1,732 | 1,732 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | 1,732 | 1,732 |
| Spruce-subalpine fir: | | | | | |
| Sawtimber | -- | 3,732 | 2,818 | -- | 6,550 |
| Poletimber | -- | 1,019 | 2,141 | -- | 3,160 |
| Sapling and seedling | -- | 2,421 | 2,140 | -- | 4,561 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 7,172 | 7,099 | -- | 14,271 |

(con.)

Table 10. (con.)

| Forest type and stand-size class | Productivity class 85-119 | 50-84 | 20-49 | 0-19 | Total acres |
|---|---|---|---|---|---|
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - - |
| White fir: | | | | | |
| Sawtimber | 2,191 | -- | -- | -- | 2,191 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 2,191 | -- | -- | -- | 2,191 |
| Spruce: | | | | | |
| Sawtimber | -- | 3,037 | 2,778 | 2,140 | 7,955 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 3,037 | 2,778 | 2,140 | 7,955 |
| Aspen: | | | | | |
| Sawtimber | 4,177 | 2,080 | 598 | -- | 6,855 |
| Poletimber | 2,331 | 12,090 | 14,968 | 1,784 | 31,173 |
| Sapling and seedling | -- | 1,406 | 2,330 | -- | 3,736 |
| Nonstocked | -- | 494 | -- | -- | 494 |
| Total | 6,508 | 16,070 | 17,896 | 1,784 | 42,258 |
| Cottonwood: | | | | | |
| Sawtimber | -- | 434 | -- | -- | 434 |
| Poletimber | -- | 230 | -- | -- | 230 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 664 | -- | -- | 664 |
| All types: | | | | | |
| Sawtimber | 8,508 | 22,418 | 17,470 | 3,872 | 52,268 |
| Poletimber | 3,012 | 15,371 | 27,842 | 1,784 | 48,009 |
| Sapling and seedling | -- | 3,827 | 8,801 | -- | 12,628 |
| Nonstocked | -- | 494 | 1,625 | -- | 2,119 |
| Total | 11,520 | 42,110 | 55,738 | 5,656 | 115,024 |

Table 11.--Area of nonindustrial privately owned timberland by forest type, stand-size class, and productivity class in west-central Colorado, 1983

| Forest type and stand-size class | Productivity class | | | | Total acres |
|---|---|---|---|---|---|
| | 85-119 | 50-84 | 20-49 | 0-19 | |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | | | |
| Douglas-fir: | | | | | |
| Sawtimber | -- | 18,957 | 34,256 | -- | 53,213 |
| Poletimber | -- | 3,940 | -- | -- | 3,940 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 7,464 | -- | 7,464 |
| Total | -- | 22,897 | 41,720 | -- | 64,617 |
| Ponderosa pine: | | | | | |
| Sawtimber | -- | -- | 3,523 | -- | 3,523 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | 11,510 | -- | 11,510 |
| Total | -- | -- | 15,033 | -- | 15,033 |
| Lodgepole pine: | | | | | |
| Sawtimber | 5,012 | 49,399 | 24,399 | -- | 78,810 |
| Poletimber | 7,507 | 5,427 | 32,121 | -- | 45,055 |
| Sapling and seedling | -- | -- | 11,586 | -- | 11,586 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 12,519 | 54,826 | 68,106 | -- | 135,451 |
| Limber pine: | | | | | |
| Sawtimber | -- | -- | -- | 5,427 | 5,427 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | -- | -- | 5,427 | 5,427 |
| Spruce-subalpine fir: | | | | | |
| Sawtimber | -- | 25,827 | 12,057 | -- | 37,884 |
| Poletimber | -- | 11,031 | 5,011 | -- | 16,042 |
| Sapling and seedling | -- | 12,375 | 5,012 | -- | 17,387 |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 49,233 | 22,080 | -- | 71,313 |

(con.)

Table 11. (con.)

| Forest type and stand-size class | Productivity class 85-119 | 50-84 | 20-49 | 0-19 | Total acres |
|---|---|---|---|---|---|
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | | | |
| White fir: | | | | | |
| Sawtimber | 6,575 | -- | -- | -- | 6,575 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | 6,575 | -- | -- | -- | 6,575 |
| Spruce: | | | | | |
| Sawtimber | -- | 16,833 | 12,475 | 5,011 | 34,319 |
| Poletimber | -- | -- | -- | -- | -- |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 16,833 | 12,475 | 5,011 | 34,319 |
| Aspen: | | | | | |
| Sawtimber | 21,978 | 21,271 | 4,815 | -- | 48,064 |
| Poletimber | 10,241 | 111,368 | 107,853 | 14,864 | 244,326 |
| Sapling and seedling | -- | 19,063 | 10,242 | -- | 29,305 |
| Nonstocked | -- | 5,755 | -- | -- | 5,755 |
| Total | 32,219 | 157,457 | 122,910 | 14,864 | 327,450 |
| Cottonwood: | | | | | |
| Sawtimber | -- | 23,555 | -- | -- | 23,555 |
| Poletimber | -- | 5,801 | -- | -- | 5,801 |
| Sapling and seedling | -- | -- | -- | -- | -- |
| Nonstocked | -- | -- | -- | -- | -- |
| Total | -- | 29,356 | -- | -- | 29,356 |
| All types: | | | | | |
| Sawtimber | 33,565 | 155,842 | 91,525 | 10,438 | 291,370 |
| Poletimber | 17,748 | 137,567 | 144,985 | 14,864 | 315,164 |
| Sapling and seedling | -- | 31,438 | 26,840 | -- | 58,278 |
| Nonstocked | -- | 5,755 | 18,974 | -- | 24,729 |
| Total | 51,313 | 330,602 | 282,324 | 25,302 | 689,541 |

Table 12.--Area of State and privately owned timberland by stand volume and ownership class in west-central Colorado, 1983

| Stand volume per acre[1] | Ownership class State | Nonindustrial private | Total |
|---|---|---|---|
| | - - - - - - - - - - - Acres - - - - - - - - - - - | | |
| Less than 1,500 board feet | 36,932 | 255,343 | 292,275 |
| 1,500 to 4,999 board feet | 34,937 | 205,129 | 240,066 |
| 5,000 to 9,999 board feet | 25,614 | 140,804 | 166,418 |
| 10,000 board feet or more | 17,541 | 88,265 | 105,806 |
| All classes | 115,024 | 689,541 | 804,565 |

[1]International ¼-inch rule.

Table 13.--Area of State and privately owned timberland by forest type and area condition class in west-central Colorado, 1983

| Forest type | Area condition class | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | Nonstocked | All classes |
| | Acres | | | | | | | | | | |
| Douglas-fir | -- | -- | -- | -- | 8,101 | 4,239 | 8,478 | 3,862 | 37,284 | 8,101 | 70,065 |
| Ponderosa pine | -- | -- | -- | -- | -- | -- | 3,862 | -- | -- | 12,498 | 16,360 |
| Lodgepole pine | -- | 8,188 | 3,862 | 14,303 | 50,978 | 41,619 | 22,166 | -- | 33,513 | -- | 174,629 |
| Limber pine | -- | -- | -- | -- | -- | -- | -- | -- | 7,159 | -- | 7,159 |
| Spruce-subalpine fir | -- | -- | 7,152 | 3,862 | 23,528 | 12,062 | 8,765 | 22,492 | 7,723 | -- | 85,584 |
| White fir | -- | -- | -- | -- | -- | -- | 8,766 | -- | -- | -- | 8,766 |
| Spruce | -- | -- | -- | -- | 4,239 | -- | 16,580 | 7,151 | 14,304 | -- | 42,274 |
| Aspen | -- | -- | 8,188 | 9,893 | 138,467 | 118,535 | 69,265 | -- | 19,111 | 6,249 | 369,708 |
| Cottonwood | -- | -- | -- | -- | -- | 6,031 | -- | -- | 23,989 | -- | 30,020 |
| All types | -- | 8,188 | 19,202 | 28,058 | 225,313 | 182,486 | 137,882 | 33,505 | 143,083 | 26,848 | 804,565 |

Table 14.--Number of growing-stock trees on State and privately owned timberland by species and diameter class in west-central Colorado, 1983

| Species | Diameter class (inches at breast height) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.0-2.9 | 3.0-4.9 | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand trees | | | | | | | | | | | | | | | |
| Douglas-fir | 810 | -- | 2,006 | 1,839 | 1,527 | 934 | 524 | 379 | 217 | 122 | 39 | -- | 56 | 16 | 4 | 8,473 |
| Ponderosa pine | 625 | -- | -- | -- | -- | 34 | -- | 26 | 18 | 23 | -- | -- | -- | -- | -- | 726 |
| Lodgepole pine | 5,642 | 7,863 | 12,420 | 11,361 | 7,152 | 3,887 | 1,946 | 362 | 212 | -- | -- | -- | -- | -- | -- | 50,845 |
| Limber pine | -- | -- | -- | -- | -- | -- | 28 | 64 | 104 | 13 | -- | -- | -- | -- | -- | 209 |
| Subalpine fir | 13,772 | 14,827 | 10,505 | 4,576 | 3,018 | 982 | 363 | 236 | 89 | 75 | 90 | -- | -- | -- | -- | 48,533 |
| White fir | 425 | -- | 425 | -- | 284 | 294 | 213 | -- | -- | -- | -- | -- | -- | -- | -- | 1,641 |
| Engelmann spruce | 7,768 | 7,975 | 6,490 | 4,172 | 2,183 | 1,912 | 1,160 | 288 | 262 | 217 | 47 | 24 | 51 | 30 | 11 | 32,590 |
| Total softwoods | 29,042 | 30,665 | 31,846 | 21,948 | 14,164 | 8,043 | 4,234 | 1,355 | 902 | 450 | 176 | 24 | 107 | 46 | 15 | 143,017 |
| Aspen | 32,772 | 30,871 | 40,693 | 25,763 | 15,423 | 5,150 | 1,762 | 572 | 269 | 45 | 49 | -- | -- | -- | -- | 153,369 |
| Cottonwood | -- | -- | 869 | 415 | 535 | 65 | -- | 143 | 110 | -- | -- | -- | -- | -- | 61 | 2,198 |
| Total hardwoods | 32,772 | 30,871 | 41,562 | 26,178 | 15,958 | 5,215 | 1,762 | 715 | 379 | 45 | 49 | -- | -- | -- | 61 | 155,567 |
| All species | 61,814 | 61,536 | 73,408 | 48,126 | 30,122 | 13,258 | 5,996 | 2,070 | 1,281 | 495 | 225 | 24 | 107 | 46 | 76 | 298,584 |

Table 15.--Number of cull and salvable dead trees on State and privately owned timberland by ownership class, and softwoods and hardwoods in west-central Colorado, 1983

| Ownership class and species group | Cull trees | | | Salvable dead trees | All dead trees |
|---|---|---|---|---|---|
| | Sound | Rotten | Total | | |
| | - - - - - - - - - - Thousand trees - - - - - - - - - | | | | |
| State: | | | | | |
| Softwoods | -- | 27 | 27 | 1,759 | 1,786 |
| Hardwoods | -- | 436 | 436 | 1,284 | 1,720 |
| Total | -- | 463 | 463 | 3,043 | 3,506 |
| Nonindustrial private: | | | | | |
| Softwoods | -- | 79 | 79 | 8,686 | 8,765 |
| Hardwoods | -- | 2,991 | 2,991 | 9,781 | 12,772 |
| Total | -- | 3,070 | 3,070 | 18,467 | 21,537 |
| Total: | | | | | |
| Softwoods | -- | 106 | 106 | 10,445 | 10,551 |
| Hardwoods | -- | 3,427 | 3,427 | 11,065 | 14,492 |
| Total | -- | 3,533 | 3,533 | 21,510 | 25,043 |

Table 16.--Net volume of growing stock on State and privately owned timberland by ownership class, forest type, and stand-size class in west-central Colorado, 1983

| Ownership class | Forest type | Stand-size class | | | | All classes |
|---|---|---|---|---|---|---|
| | | Sawtimber | Poletimber | Sapling/ seedling | Nonstocked | |
| | | - - - - - - - - - - - - Thousand cubic feet - - - - - - - - - - - - | | | | |
| State: | | | | | | |
| | Douglas-fir | 7,215 | 441 | -- | 52 | 7,708 |
| | Ponderosa pine | 111 | -- | -- | 41 | 152 |
| | Lodgepole pine | 59,752 | 21,913 | -- | -- | 81,665 |
| | Limber pine | 725 | -- | -- | -- | 725 |
| | Spruce-subalpine fir | 16,205 | 8,003 | 3,193 | -- | 27,401 |
| | White fir | 2,399 | -- | -- | -- | 2,399 |
| | Spruce | 20,164 | -- | -- | -- | 20,164 |
| | Aspen | 19,294 | 43,252 | 977 | -- | 63,523 |
| | Cottonwood | 189 | 306 | -- | -- | 495 |
| | All types | 126,054 | 73,915 | 4,170 | 93 | 204,232 |
| Nonindustrial private: | | | | | | |
| | Douglas-fir | 83,747 | 5,813 | -- | 576 | 90,136 |
| | Ponderosa pine | 1,158 | -- | -- | 479 | 1,637 |
| | Lodgepole pine | 211,716 | 93,330 | -- | -- | 305,046 |
| | Limber pine | 2,270 | -- | -- | -- | 2,270 |
| | Spruce-subalpine fir | 102,236 | 63,690 | 10,041 | -- | 175,967 |
| | White fir | 7,202 | -- | -- | -- | 7,202 |
| | Spruce | 65,893 | -- | -- | -- | 65,893 |
| | Aspen | 112,860 | 389,328 | 10,747 | -- | 512,935 |
| | Cottonwood | 10,265 | 7,708 | -- | -- | 17,973 |
| | All types | 597,347 | 559,869 | 20,788 | 1,055 | 1,179,059 |
| Total: | | | | | | |
| | Douglas-fir | 90,962 | 6,254 | -- | 628 | 97,844 |
| | Ponderosa pine | 1,269 | -- | -- | 520 | 1,789 |
| | Lodgepole pine | 271,468 | 115,243 | -- | -- | 386,711 |
| | Limber pine | 2,995 | -- | -- | -- | 2,995 |
| | Spruce-subalpine fir | 118,441 | 71,693 | 13,234 | -- | 203,368 |
| | White fir | 9,601 | -- | -- | -- | 9,601 |
| | Spruce | 86,057 | -- | -- | -- | 86,057 |
| | Aspen | 132,154 | 432,580 | 11,724 | -- | 576,458 |
| | Cottonwood | 10,454 | 8,014 | -- | -- | 18,468 |
| | All types | 723,401 | 633,784 | 24,958 | 1,148 | 1,383,291 |

Table 17.--Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in west-central Colorado, 1983

| Ownership class | Forest type | Stand-size class | | | | All classes |
|---|---|---|---|---|---|---|
| | | Sawtimber | Poletimber | Sapling/ seedling | Nonstocked | |
| | | - - - Thousand board feet, International ¼-inch rule - - - | | | | |
| State: | | | | | | |
| | Douglas-fir | 29,049 | 1,210 | -- | 198 | 30,457 |
| | Ponderosa pine | 442 | -- | -- | 201 | 643 |
| | Lodgepole pine | 188,116 | 28,071 | -- | -- | 216,187 |
| | Limber pine | 3,237 | -- | -- | -- | 3,237 |
| | Spruce-subalpine fir | 60,564 | 14,874 | 9,344 | -- | 84,782 |
| | White fir | 7,841 | -- | -- | -- | 7,841 |
| | Spruce | 69,314 | -- | -- | -- | 69,314 |
| | Aspen | 56,697 | 52,005 | 1,858 | -- | 110,560 |
| | Cottonwood | 886 | 159 | -- | -- | 1,045 |
| | All types | 416,146 | 96,319 | 11,202 | 399 | 524,066 |
| Nonindustrial private: | | | | | | |
| | Douglas-fir | 337,355 | 15,954 | -- | 2,064 | 355,373 |
| | Ponderosa pine | 4,601 | -- | -- | 2,345 | 6,946 |
| | Lodgepole pine | 716,641 | 110,088 | -- | -- | 826,729 |
| | Limber pine | 10,137 | -- | -- | -- | 10,137 |
| | Spruce-subalpine fir | 398,852 | 112,222 | 30,223 | -- | 541,297 |
| | White fir | 23,533 | -- | -- | -- | 23,533 |
| | Spruce | 217,909 | -- | -- | -- | 217,909 |
| | Aspen | 362,673 | 444,505 | 19,108 | -- | 826,286 |
| | Cottonwood | 48,035 | 4,003 | -- | -- | 52,038 |
| | All types | 2,119,736 | 686,772 | 49,331 | 4,409 | 2,860,248 |
| Total: | | | | | | |
| | Douglas-fir | 366,404 | 17,164 | -- | 2,262 | 385,830 |
| | Ponderosa pine | 5,043 | -- | -- | 2,546 | 7,589 |
| | Lodgepole pine | 904,757 | 138,159 | -- | -- | 1,042,916 |
| | Limber pine | 13,374 | -- | -- | -- | 13,374 |
| | Spruce-subalpine fir | 459,416 | 127,096 | 39,567 | -- | 626,079 |
| | White fir | 31,374 | -- | -- | -- | 31,374 |
| | Spruce | 287,223 | -- | -- | -- | 287,223 |
| | Aspen | 419,370 | 496,510 | 20,966 | -- | 936,846 |
| | Cottonwood | 48,921 | 4,162 | -- | -- | 53,083 |
| | All types | 2,535,882 | 783,091 | 60,533 | 4,808 | 3,384,314 |

Table 18.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class, forest type, and stand-size class in west-central Colorado, 1983

| Ownership class | Forest type | Stand-size class | | | | All classes |
|---|---|---|---|---|---|---|
| | | Sawtimber | Poletimber | Sapling/ seedling | Nonstocked | |
| | | - - - - - - - Thousand board feet, Scribner rule - - - - - - - | | | | |
| State: | | | | | | |
| | Douglas-fir | 24,590 | 1,049 | -- | 165 | 25,804 |
| | Ponderosa pine | 367 | -- | -- | 174 | 541 |
| | Lodgepole pine | 160,434 | 24,076 | -- | -- | 184,510 |
| | Limber pine | 2,736 | -- | -- | -- | 2,736 |
| | Spruce-subalpine fir | 50,693 | 12,568 | 7,936 | -- | 71,197 |
| | White fir | 6,742 | -- | -- | -- | 6,742 |
| | Spruce | 59,092 | -- | -- | -- | 59,092 |
| | Aspen | 48,231 | 44,270 | 1,559 | -- | 94,060 |
| | Cottonwood | 771 | 127 | -- | -- | 898 |
| | All types | 353,656 | 82,090 | 9,495 | 339 | 445,580 |
| Nonindustrial private: | | | | | | |
| | Douglas-fir | 285,506 | 13,838 | -- | 1,713 | 301,057 |
| | Ponderosa pine | 3,814 | -- | -- | 2,030 | 5,844 |
| | Lodgepole pine | 610,021 | 94,305 | -- | -- | 704,326 |
| | Limber pine | 8,569 | -- | -- | -- | 8,569 |
| | Spruce-subalpine fir | 334,830 | 95,459 | 25,473 | -- | 455,762 |
| | White fir | 20,237 | -- | -- | -- | 20,237 |
| | Spruce | 185,525 | -- | -- | -- | 185,525 |
| | Aspen | 308,953 | 378,501 | 16,042 | -- | 703,496 |
| | Cottonwood | 41,783 | 3,211 | -- | -- | 44,994 |
| | All types | 1,799,238 | 585,314 | 41,515 | 3,743 | 2,429,810 |
| Total: | | | | | | |
| | Douglas-fir | 310,096 | 14,887 | -- | 1,878 | 326,861 |
| | Ponderosa pine | 4,181 | -- | -- | 2,204 | 6,385 |
| | Lodgepole pine | 770,455 | 118,381 | -- | -- | 888,836 |
| | Limber pine | 11,305 | -- | -- | -- | 11,305 |
| | Spruce-subalpine fir | 385,523 | 108,027 | 33,409 | -- | 526,959 |
| | White fir | 26,979 | -- | -- | -- | 26,979 |
| | Spruce | 244,617 | -- | -- | -- | 244,617 |
| | Aspen | 357,184 | 422,771 | 17,601 | -- | 797,556 |
| | Cottonwood | 42,554 | 3,338 | -- | -- | 45,892 |
| | All types | 2,152,894 | 667,404 | 51,010 | 4,082 | 2,875,390 |

Table 19.--Net volume of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1983

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Douglas-fir | 7,997 | 81,349 | 89,346 |
| Ponderosa pine | 167 | 2,037 | 2,204 |
| Lodgepole pine | 85,500 | 322,252 | 407,752 |
| Limber pine | 894 | 4,032 | 4,926 |
| Subalpine fir | 17,338 | 114,828 | 132,166 |
| White fir | 2,509 | 8,797 | 11,306 |
| Engelmann spruce | 32,463 | 147,114 | 179,577 |
| Total softwoods | 146,868 | 680,409 | 827,277 |
| Aspen | 56,869 | 480,677 | 537,546 |
| Cottonwood | 495 | 17,973 | 18,468 |
| Total hardwoods | 57,364 | 498,650 | 556,014 |
| All species | 204,232 | 1,179,059 | 1,383,291 |

Table 20.--Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1983

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - Thousand board feet, International ¼-inch rule - - | | |
| Douglas-fir | 32,279 | 339,189 | 371,468 |
| Ponderosa pine | 816 | 9,987 | 10,803 |
| Lodgepole pine | 238,773 | 927,507 | 1,166,280 |
| Limber pine | 4,072 | 18,834 | 22,906 |
| Subalpine fir | 46,544 | 295,458 | 342,002 |
| White fir | 9,466 | 34,698 | 44,164 |
| Engelmann spruce | 113,500 | 557,427 | 670,927 |
| Total softwoods | 445,450 | 2,183,100 | 2,628,550 |
| Aspen | 77,571 | 625,110 | 702,681 |
| Cottonwood | 1,045 | 52,038 | 53,083 |
| Total hardwoods | 78,616 | 677,148 | 755,764 |
| All species | 524,066 | 2,860,248 | 3,384,314 |

Table 21.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1983

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - Thousand board feet, Scribner rule - - - - - | | |
| Douglas-fir | 27,315 | 287,215 | 314,530 |
| Ponderosa pine | 703 | 8,626 | 9,329 |
| Lodgepole pine | 203,612 | 790,021 | 993,633 |
| Limber pine | 3,440 | 15,894 | 19,334 |
| Subalpine fir | 39,488 | 250,403 | 289,891 |
| White fir | 8,135 | 29,572 | 37,707 |
| Engelmann spruce | 96,011 | 471,376 | 567,387 |
| Total softwoods | 378,704 | 1,853,107 | 2,231,811 |
| Aspen | 65,978 | 531,709 | 597,687 |
| Cottonwood | 898 | 44,994 | 45,892 |
| Total hardwoods | 66,876 | 576,703 | 643,579 |
| All species | 445,580 | 2,429,810 | 2,875,390 |

Table 22.--Net volume of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1983

| Species | Diameter class (inches at breast height) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand cubic feet | | | | | | | | | | | | | |
| Douglas-fir | 3,663 | 7,955 | 15,184 | 13,427 | 12,468 | 12,552 | 7,688 | 6,741 | 2,593 | -- | 4,633 | 1,692 | 750 | 89,346 |
| Ponderosa pine | -- | -- | -- | 438 | -- | 554 | 692 | 520 | -- | -- | -- | -- | -- | 2,204 |
| Lodgepole pine | 43,183 | 95,345 | 105,168 | 84,181 | 56,818 | 13,358 | 9,699 | -- | -- | -- | -- | -- | -- | 407,752 |
| Limber pine | -- | -- | -- | -- | 675 | 1,436 | 2,292 | 523 | -- | -- | -- | -- | -- | 4,926 |
| Subalpine fir | 27,236 | 24,949 | 32,947 | 18,569 | 8,052 | 8,150 | 3,614 | 3,542 | 5,107 | -- | -- | -- | -- | 132,166 |
| White fir | 659 | -- | 2,462 | 3,510 | 4,675 | -- | -- | -- | -- | -- | -- | -- | -- | 11,306 |
| Engelmann spruce | 14,583 | 23,957 | 22,164 | 34,011 | 30,136 | 11,600 | 13,199 | 12,843 | 4,310 | 1,998 | 5,126 | 4,020 | 1,630 | 179,577 |
| Total softwoods | 89,324 | 152,206 | 177,925 | 154,136 | 112,824 | 47,650 | 37,184 | 24,169 | 12,010 | 1,998 | 9,759 | 5,712 | 2,380 | 827,277 |
| Aspen | 89,275 | 146,766 | 156,919 | 77,496 | 38,751 | 15,181 | 9,118 | 1,360 | 2,680 | -- | -- | -- | -- | 537,546 |
| Cottonwood | 874 | 1,946 | 4,376 | 818 | -- | 2,543 | 2,279 | -- | -- | -- | -- | -- | 5,632 | 18,468 |
| Total hardwoods | 90,149 | 148,712 | 161,295 | 78,314 | 38,751 | 17,724 | 11,397 | 1,360 | 2,680 | -- | -- | -- | 5,632 | 556,014 |
| All species | 179,473 | 300,918 | 339,220 | 232,450 | 151,575 | 65,374 | 48,581 | 25,529 | 14,690 | 1,998 | 9,759 | 5,712 | 8,012 | 1,383,291 |

Table 23.--Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1983

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, International ¼-inch rule | | | | | | | | | | | |
| Douglas-fir | 52,252 | 60,219 | 62,294 | 65,262 | 40,104 | 36,504 | 14,313 | -- | 26,249 | 9,797 | 4,474 | 371,468 |
| Ponderosa pine | -- | 1,889 | -- | 2,717 | 3,651 | 2,546 | -- | -- | -- | -- | -- | 10,803 |
| Lodgepole pine | 365,715 | 393,209 | 287,809 | 69,272 | 50,275 | -- | -- | -- | -- | -- | -- | 1,166,280 |
| Limber pine | -- | -- | 3,209 | 6,538 | 10,519 | 2,640 | -- | -- | -- | -- | -- | 22,906 |
| Subalpine fir | 114,623 | 87,320 | 38,296 | 40,207 | 17,859 | 17,588 | 26,109 | -- | -- | -- | -- | 342,002 |
| White fir | 7,260 | 14,597 | 22,307 | -- | -- | -- | -- | -- | -- | -- | -- | 44,164 |
| Engelmann spruce | 79,285 | 157,995 | 147,769 | 58,683 | 66,800 | 65,618 | 23,272 | 10,724 | 28,382 | 22,930 | 9,469 | 670,927 |
| Total softwoods | 619,135 | 715,229 | 561,684 | 242,679 | 189,208 | 124,896 | 63,694 | 10,724 | 54,631 | 32,727 | 13,943 | 2,628,550 |
| Aspen | XXXXX | 366,025 | 193,586 | 76,951 | 46,145 | 6,622 | 13,352 | -- | -- | -- | -- | 702,681 |
| Cottonwood | XXXXX | 4,162 | -- | 12,474 | 10,819 | -- | -- | -- | -- | -- | 25,628 | 53,083 |
| Total hardwoods | XXXXX | 370,187 | 193,586 | 89,425 | 56,964 | 6,622 | 13,352 | -- | -- | -- | 25,628 | 755,764 |
| All species | 619,135 | 1,085,416 | 755,270 | 332,104 | 246,172 | 131,518 | 77,046 | 10,724 | 54,631 | 32,727 | 39,571 | 3,384,314 |

Table 24.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1983

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, Scribner rule | | | | | | | | | | | |
| Douglas-fir | 46,271 | 51,983 | 51,632 | 53,236 | 32,624 | 30,387 | 12,447 | -- | 23,250 | 8,719 | 3,981 | 314,530 |
| Ponderosa pine | -- | 1,574 | -- | 2,343 | 3,208 | 2,204 | -- | -- | -- | -- | -- | 9,329 |
| Lodgepole pine | 318,499 | 332,475 | 241,475 | 58,296 | 42,888 | -- | -- | -- | -- | -- | -- | 993,633 |
| Limber pine | -- | -- | 2,707 | 5,523 | 8,878 | 2,226 | -- | -- | -- | -- | -- | 19,334 |
| Subalpine fir | 100,599 | 73,375 | 31,803 | 32,692 | 14,436 | 14,645 | 22,341 | -- | -- | -- | -- | 289,891 |
| White fir | 6,462 | 12,702 | 18,543 | -- | -- | -- | -- | -- | -- | -- | -- | 37,707 |
| Engelmann spruce | 69,059 | 133,463 | 121,797 | 47,533 | 55,109 | 56,074 | 20,712 | 9,545 | 25,259 | 20,408 | 8,428 | 567,387 |
| Total softwoods | 540,890 | 605,572 | 467,957 | 199,623 | 157,143 | 105,536 | 55,500 | 9,545 | 48,509 | 29,127 | 12,409 | 2,231,811 |
| Aspen | XXXXX | 314,341 | 162,361 | 64,806 | 39,152 | 5,610 | 11,417 | -- | -- | -- | -- | 597,687 |
| Cottonwood | XXXXX | 3,338 | -- | 10,499 | 9,246 | -- | -- | -- | -- | -- | 22,809 | 45,892 |
| Total hardwoods | XXXXX | 317,679 | 162,361 | 75,305 | 48,398 | 5,610 | 11,417 | -- | -- | -- | 22,809 | 643,579 |
| All species | 540,890 | 923,251 | 630,318 | 274,928 | 205,541 | 111,146 | 66,917 | 9,545 | 48,509 | 29,127 | 35,218 | 2,875,390 |

Table 25.--Net volume of timber on State and privately owned timberland by class of timber, and softwoods and hardwoods in west-central Colorado, 1983

| Class of timber | Softwoods | Hardwoods | All classes |
|---|---|---|---|
| | Thousand cubic feet | | |
| Sawtimber trees: | | | |
| Saw-log portion | 519,947 | 116,186 | 636,133 |
| Upper-stem portion | 65,800 | 39,672 | 105,472 |
| Total | 585,747 | 155,858 | 741,605 |
| Poletimber trees | 241,530 | 400,156 | 641,686 |
| All growing stock trees | 827,277 | 556,014 | 1,383,291 |
| Sound cull trees | -- | -- | -- |
| Rotten cull trees | 1,286 | 4,976 | 6,262 |
| Salvable dead trees | 66,700 | 33,103 | 99,803 |
| All timber | 895,263 | 594,093 | 1,489,356 |

Table 26.--Net volume of growing stock on State and privately owned timberland by forest type and species in west-central Colorado, 1983

| Forest type | Species | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Douglas-fir | Ponderosa pine | Lodgepole pine | Limber pine | Subalpine fir | White fir | Engelmann spruce | Total softwoods | Aspen | Cotton-wood | Total hardwoods | All species |
| | Thousand cubic feet | | | | | | | | | | | |
| Douglas-fir | 75,508 | 1,246 | -- | 1,931 | 9,934 | -- | 4,438 | 93,057 | 4,787 | -- | 4,787 | 97,844 |
| Ponderosa pine | 628 | 958 | -- | -- | -- | -- | -- | 1,586 | 203 | -- | 203 | 1,789 |
| Lodgepole pine | -- | -- | 367,442 | -- | 3,869 | 929 | 2,727 | 374,967 | 11,744 | -- | 11,744 | 386,711 |
| Limber pine | -- | -- | -- | 2,995 | -- | -- | -- | 2,995 | -- | -- | -- | 2,995 |
| Spruce-subalpine fir | 8,665 | -- | 18,148 | -- | 88,184 | -- | 84,635 | 199,632 | 3,736 | -- | 3,736 | 203,368 |
| White fir | 649 | -- | 477 | -- | -- | 8,475 | -- | 9,601 | -- | -- | -- | 9,601 |
| Spruce | 613 | -- | 7,471 | -- | -- | -- | 73,362 | 81,446 | 4,611 | -- | 4,611 | 86,057 |
| Aspen | 3,283 | -- | 14,214 | -- | 30,179 | 1,902 | 14,415 | 63,993 | 512,465 | -- | 512,465 | 576,458 |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | 18,468 | 18,468 | 18,468 |
| All types | 89,346 | 2,204 | 407,752 | 4,926 | 132,166 | 11,306 | 179,577 | 827,277 | 537,546 | 18,468 | 556,014 | 1,383,291 |

Table 27.--Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by forest type and species in west-central Colorado, 1983

| Forest type | Species | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Douglas-fir | Ponderosa pine | Lodgepole pine | Limber pine | Subalpine fir | White fir | Engelmann spruce | Total softwoods | Aspen | Cotton-wood | Total hardwoods | All species |
| | Thousand board feet, International ¼-inch rule | | | | | | | | | | | |
| Douglas-fir | 334,973 | 6,368 | -- | 9,532 | 20,422 | -- | 14,535 | 385,830 | -- | -- | -- | 385,830 |
| Ponderosa pine | 3,154 | 4,435 | -- | -- | -- | -- | -- | 7,589 | -- | -- | -- | 7,589 |
| Lodgepole pine | -- | -- | 1,022,088 | -- | 4,255 | 3,369 | 13,204 | 1,042,916 | -- | -- | -- | 1,042,916 |
| Limber pine | -- | -- | -- | 13,374 | -- | -- | -- | 13,374 | -- | -- | -- | 13,374 |
| Spruce-subalpine fir | 23,134 | -- | 70,817 | -- | 206,196 | -- | 325,932 | 626,079 | -- | -- | -- | 626,079 |
| White fir | -- | -- | -- | -- | -- | 31,374 | -- | 31,374 | -- | -- | -- | 31,374 |
| Spruce | 3,103 | -- | 33,776 | -- | -- | -- | 250,344 | 287,223 | -- | -- | -- | 287,223 |
| Aspen | 7,104 | -- | 39,599 | -- | 111,129 | 9,421 | 66,912 | 234,165 | 702,681 | -- | 702,681 | 936,846 |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | 53,083 | 53,083 | 53,083 |
| All types | 371,468 | 10,803 | 1,166,280 | 22,906 | 342,002 | 44,164 | 670,927 | 2,628,550 | 702,681 | 53,083 | 755,764 | 3,384,314 |



Table 28.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by forest type and species in west-central Colorado, 1983

| Forest type | Species | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Douglas-fir | Ponderosa pine | Lodgepole pine | Limber pine | Subalpine fir | White fir | Engelmann spruce | Total softwoods | Aspen | Cotton-wood | Total hardwoods | All species |
| | Thousand board feet, Scribner rule | | | | | | | | | | | |
| Douglas-fir | 283,401 | 5,551 | -- | 8,029 | 17,522 | -- | 12,358 | 326,861 | -- | -- | -- | 326,861 |
| Ponderosa pine | 2,607 | 3,778 | -- | -- | -- | -- | -- | 6,385 | -- | -- | -- | 6,385 |
| Lodgepole pine | -- | -- | 871,078 | -- | 3,788 | 2,999 | 10,971 | 888,836 | -- | -- | -- | 888,836 |
| Limber pine | -- | -- | -- | 11,305 | -- | -- | -- | 11,305 | -- | -- | -- | 11,305 |
| Spruce-subalpine fir | 19,681 | -- | 60,316 | -- | 174,004 | -- | 272,958 | 526,959 | -- | -- | -- | 526,959 |
| White fir | -- | -- | -- | -- | -- | 26,979 | -- | 26,979 | -- | -- | -- | 26,979 |
| Spruce | 2,556 | -- | 28,667 | -- | -- | -- | 213,394 | 244,617 | -- | -- | -- | 244,617 |
| Aspen | 6,285 | -- | 33,572 | -- | 94,577 | 7,729 | 57,706 | 199,869 | 597,687 | -- | 597,687 | 797,556 |
| Cottonwood | -- | -- | -- | -- | -- | -- | -- | -- | -- | 45,892 | 45,892 | 45,892 |
| All types | 314,530 | 9,329 | 993,633 | 19,334 | 289,891 | 37,707 | 567,387 | 2,231,811 | 597,687 | 45,892 | 643,579 | 2,875,390 |

Table 29.--Net annual growth of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - Thousand cubic feet - - - - - - - - | | |
| Douglas-fir | 194 | 1,768 | 1,962 |
| Ponderosa pine | 1 | 16 | 17 |
| Lodgepole pine | 1,599 | 5,418 | 7,017 |
| Limber pine | 9 | 39 | 48 |
| Subalpine fir | 297 | 1,671 | 1,968 |
| White fir | 40 | 136 | 176 |
| Engelmann spruce | 469 | 2,512 | 2,981 |
| Total softwoods | 2,609 | 11,560 | 14,169 |
| Aspen | 1,306 | 11,410 | 12,716 |
| Cottonwood | 17 | 522 | 539 |
| Total hardwoods | 1,323 | 11,932 | 13,255 |
| All species | 3,932 | 23,492 | 27,424 |

Table 30.--Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - Thousand board feet, International ¼-inch rule - - | | |
| Douglas-fir | 855 | 8,803 | 9,658 |
| Ponderosa pine | 7 | 88 | 95 |
| Lodgepole pine | 4,793 | 11,670 | 16,463 |
| Limber pine | 53 | 231 | 284 |
| Subalpine fir | 3,467 | 14,249 | 17,716 |
| White fir | 1,063 | 3,274 | 4,337 |
| Engelmann spruce | 1,827 | 10,096 | 11,923 |
| Total softwoods | 12,065 | 48,411 | 60,476 |
| Aspen | 5,307 | 36,722 | 42,029 |
| Cottonwood | 16 | 742 | 758 |
| Total hardwoods | 5,323 | 37,464 | 42,787 |
| All species | 17,388 | 85,875 | 103,263 |

Table 31.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - Thousand board feet, Scribner rule - - - - | | |
| Douglas-fir | 723 | 7,429 | 8,152 |
| Ponderosa pine | 6 | 79 | 85 |
| Lodgepole pine | 4,202 | 10,275 | 14,477 |
| Limber pine | 44 | 193 | 237 |
| Subalpine fir | 3,042 | 12,506 | 15,548 |
| White fir | 927 | 2,847 | 3,774 |
| Engelmann spruce | 1,396 | 7,973 | 9,369 |
| Total softwoods | 10,340 | 41,302 | 51,642 |
| Aspen | 4,564 | 31,585 | 36,149 |
| Cottonwood | 14 | 675 | 689 |
| Total hardwoods | 4,578 | 32,260 | 36,838 |
| All species | 14,918 | 73,562 | 88,480 |

Table 32.--Net annual growth of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand cubic feet | | | | | | | | | | | | | |
| Douglas-fir | 500 | 238 | 385 | 311 | 175 | 166 | 77 | 58 | 10 | -- | 36 | 4 | 2 | 1,962 |
| Ponderosa pine | -- | -- | -- | 3 | -- | 8 | 2 | 4 | -- | -- | -- | -- | -- | 17 |
| Lodgepole pine | 2,824 | 2,010 | 1,925 | 22 | 501 | 146 | -411 | -- | -- | -- | -- | -- | -- | 7,017 |
| Limber pine | -- | -- | -- | -- | 6 | 21 | 19 | 2 | -- | -- | -- | -- | -- | 48 |
| Subalpine fir | 783 | 409 | 713 | 376 | -508 | 51 | 62 | 32 | 50 | -- | -- | -- | -- | 1,968 |
| White fir | 54 | -- | -79 | 101 | 100 | -- | -- | -- | -- | -- | -- | -- | -- | 176 |
| Engelmann spruce | 494 | 492 | 371 | 649 | 531 | 165 | 103 | 63 | 15 | 17 | 53 | 25 | 3 | 2,981 |
| Total softwoods | 4,655 | 3,149 | 3,315 | 1,462 | 805 | 557 | -148 | 159 | 75 | 17 | 89 | 29 | 5 | 14,169 |
| Aspen | 4,615 | 3,938 | 2,855 | 1,005 | 154 | 47 | 80 | 5 | 17 | -- | -- | -- | -- | 12,716 |
| Cottonwood | 197 | 41 | 139 | 19 | -- | 35 | 31 | -- | -- | -- | -- | -- | 77 | 539 |
| Total hardwoods | 4,812 | 3,979 | 2,994 | 1,024 | 154 | 82 | 111 | 5 | 17 | -- | -- | -- | 77 | 13,255 |
| All species | 9,467 | 7,128 | 6,309 | 2,486 | 959 | 639 | -37 | 164 | 92 | 17 | 89 | 29 | 82 | 27,424 |

Table 33.--Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, International ¼-inch rule | | | | | | | | | | | |
| Douglas-fir | 4,785 | 1,816 | 1,006 | 942 | 438 | 348 | 65 | -- | 224 | 24 | 10 | 9,658 |
| Ponderosa pine | -- | 15 | -- | 47 | 13 | 20 | -- | -- | -- | -- | -- | 95 |
| Lodgepole pine | 13,150 | 1,568 | 3,082 | 793 | -2,130 | -- | -- | -- | -- | -- | -- | 16,463 |
| Limber pine | -- | -- | 39 | 125 | 107 | 13 | -- | -- | -- | -- | -- | 284 |
| Subalpine fir | 17,115 | 2,076 | -2,501 | 259 | 321 | 153 | 293 | -- | -- | -- | -- | 17,716 |
| White fir | 3,251 | 564 | 522 | -- | -- | -- | -- | -- | -- | -- | -- | 4,337 |
| Engelmann spruce | 3,000 | 3,615 | 2,853 | 861 | 546 | 333 | 91 | 108 | 335 | 160 | 21 | 11,923 |
| Total softwoods | 41,301 | 9,654 | 5,001 | 3,027 | -705 | 867 | 449 | 108 | 559 | 184 | 31 | 60,476 |
| Aspen | XXXXX | 40,249 | 990 | 292 | 396 | 25 | 77 | -- | -- | -- | -- | 42,029 |
| Cottonwood | XXXXX | 99 | -- | 159 | 128 | -- | -- | -- | -- | -- | 372 | 758 |
| Total hardwoods | XXXXX | 40,348 | 990 | 451 | 524 | 25 | 77 | -- | -- | -- | 372 | 42,787 |
| All species | 41,301 | 50,002 | 5,991 | 3,478 | -181 | 892 | 526 | 108 | 559 | 184 | 403 | 103,263 |

Table 34.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, Scribner rule | | | | | | | | | | | |
| Douglas-fir | 4,221 | 1,454 | 791 | 741 | 344 | 304 | 64 | -- | 202 | 22 | 9 | 8,152 |
| Ponderosa pine | -- | 14 | -- | 42 | 11 | 18 | -- | -- | -- | -- | -- | 85 |
| Lodgepole pine | 11,629 | 1,271 | 2,617 | 729 | -1,769 | -- | -- | -- | -- | -- | -- | 14,477 |
| Limber pine | -- | -- | 32 | 104 | 89 | 12 | -- | -- | -- | -- | -- | 237 |
| Subalpine fir | 15,119 | 1,640 | -2,063 | 203 | 252 | 141 | 256 | -- | -- | -- | -- | 15,548 |
| White fir | 2,893 | 472 | 409 | -- | -- | -- | -- | -- | -- | -- | -- | 3,774 |
| Engelmann spruce | 2,182 | 2,860 | 2,241 | 676 | 460 | 314 | 81 | 96 | 299 | 142 | 18 | 9,369 |
| Total softwoods | 36,044 | 7,711 | 4,027 | 2,495 | -613 | 789 | 401 | 96 | 501 | 164 | 27 | 51,642 |
| Aspen | XXXXX | 34,552 | 895 | 269 | 345 | 22 | 66 | -- | -- | -- | -- | 36,149 |
| Cottonwood | XXXXX | 91 | -- | 148 | 118 | -- | -- | -- | -- | -- | 332 | 689 |
| Total hardwoods | XXXXX | 34,643 | 895 | 417 | 463 | 22 | 66 | -- | -- | -- | 332 | 36,838 |
| All species | 36,044 | 42,354 | 4,922 | 2,912 | -150 | 811 | 467 | 96 | 501 | 164 | 359 | 88,480 |

Table 35.--Annual mortality of growing stock on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - Thousand cubic feet - - - - - - - - | | |
| Lodgepole pine | 205 | 1,290 | 1,495 |
| Subalpine fir | 109 | 602 | 711 |
| White fir | 41 | 124 | 165 |
| Engelmann spruce | 5 | 63 | 68 |
| Total softwoods | 360 | 2,079 | 2,439 |
| Aspen | 243 | 2,346 | 2,589 |
| Total hardwoods | 243 | 2,346 | 2,589 |
| All species | 603 | 4,425 | 5,028 |

Table 36.--Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - Thousand board feet, International ¼-inch rule - | | |
| Lodgepole pine | 759 | 5,826 | 6,585 |
| Subalpine fir | 498 | 2,581 | 3,079 |
| White fir | 122 | 364 | 486 |
| Total softwoods | 1,379 | 8,771 | 10,150 |
| Aspen | 248 | 2,910 | 3,158 |
| Total hardwoods | 248 | 2,910 | 3,158 |
| All species | 1,627 | 11,681 | 13,308 |

Table 37.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - Thousand board feet, Scribner rule - - - - | | |
| Lodgepole pine | 646 | 4,949 | 5,595 |
| Subalpine fir | 407 | 2,109 | 2,516 |
| White fir | 108 | 324 | 432 |
| Total softwoods | 1,161 | 7,382 | 8,543 |
| Aspen | 211 | 2,473 | 2,684 |
| Total hardwoods | 211 | 2,473 | 2,684 |
| All species | 1,372 | 9,855 | 11,227 |



Table 38.--Annual mortality of growing stock on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5.0-6.9 | 7.0-8.9 | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | - - - - - - - - - - - - - - - - - - - - - - Thousand cubic feet - - - - - - - - - - - - - - - - - - - - - - | | | | | | | | | | | | | |
| Lodgepole pine | -- | 134 | -- | 854 | -- | -- | 507 | -- | -- | -- | -- | -- | -- | 1,495 |
| Subalpine fir | -- | 94 | -- | -- | 617 | -- | -- | -- | -- | -- | -- | -- | -- | 711 |
| White fir | -- | -- | 165 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 165 |
| Engelmann spruce | 68 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 68 |
| Total softwoods | 68 | 228 | 165 | 854 | 617 | -- | 507 | -- | -- | -- | -- | -- | -- | 2,439 |
| Aspen | 1,032 | 364 | 549 | 264 | 290 | 90 | -- | -- | -- | -- | -- | -- | -- | 2,589 |
| Total hardwoods | 1,032 | 364 | 549 | 264 | 290 | 90 | -- | -- | -- | -- | -- | -- | -- | 2,589 |
| All species | 1,100 | 592 | 714 | 1,118 | 907 | 90 | 507 | -- | -- | -- | -- | -- | -- | 5,028 |

Table 39.--Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, International ¼-inch rule | | | | | | | | | | | |
| Lodgepole pine | -- | 3,956 | -- | -- | 2,629 | -- | -- | -- | -- | -- | -- | 6,585 |
| Subalpine fir | -- | -- | 3,079 | -- | -- | -- | -- | -- | -- | -- | -- | 3,079 |
| White fir | 486 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 486 |
| Total softwoods | 486 | 3,956 | 3,079 | -- | 2,629 | -- | -- | -- | -- | -- | -- | 10,150 |
| Aspen | XXXXX | 1,188 | 1,532 | 438 | -- | -- | -- | -- | -- | -- | -- | 3,158 |
| Total hardwoods | XXXXX | 1,188 | 1,532 | 438 | -- | -- | -- | -- | -- | -- | -- | 3,158 |
| All species | 486 | 5,144 | 4,611 | 438 | 2,629 | -- | -- | -- | -- | -- | -- | 13,308 |

Table 40.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by species and diameter class in west-central Colorado, 1982

| Species | Diameter class (inches at breast height) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 9.0-10.9 | 11.0-12.9 | 13.0-14.9 | 15.0-16.9 | 17.0-18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-28.9 | 29.0+ | All classes |
| | Thousand board feet, Scribner rule | | | | | | | | | | | |
| Lodgepole pine | -- | 3,350 | -- | -- | 2,245 | -- | -- | -- | -- | -- | -- | 5,595 |
| Subalpine fir | -- | -- | 2,516 | -- | -- | -- | -- | -- | -- | -- | -- | 2,516 |
| White fir | 432 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 432 |
| Total softwoods | 432 | 3,350 | 2,516 | -- | 2,245 | -- | -- | -- | -- | -- | -- | 8,543 |
| Aspen | XXXXX | 1,025 | 1,292 | 367 | -- | -- | -- | -- | -- | -- | -- | 2,684 |
| Total hardwoods | XXXXX | 1,025 | 1,292 | 367 | -- | -- | -- | -- | -- | -- | -- | 2,684 |
| All species | 432 | 4,375 | 3,808 | 367 | 2,245 | -- | -- | -- | -- | -- | -- | 11,227 |

Table 41.--Annual mortality of growing stock on State and privately owned timberland by cause of death and species in west-central Colorado, 1982

| Species | Cause of death | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Insects | Disease | Fire | Animal | Weather | Suppression | Logging | Unknown[1] | Total |
| | Thousand cubic feet | | | | | | | | |
| Lodgepole pine | -- | 486 | -- | 209 | 348 | -- | -- | 452 | 1,495 |
| Subalpine fir | 295 | 322 | -- | -- | -- | 94 | -- | -- | 711 |
| White fir | 165 | -- | -- | -- | -- | -- | -- | -- | 165 |
| Engelmann spruce | -- | -- | -- | -- | -- | -- | -- | 68 | 68 |
| Total softwoods | 460 | 808 | -- | 209 | 348 | 94 | -- | 520 | 2,439 |
| Aspen | -- | 1,078 | 76 | -- | 111 | -- | -- | 1,324 | 2,589 |
| Total hardwoods | -- | 1,078 | 76 | -- | 111 | -- | -- | 1,324 | 2,589 |
| All species | 460 | 1,886 | 76 | 209 | 459 | 94 | -- | 1,844 | 5,028 |

[1]Because many destructive agents often attack trees in concert or in succession, it is often difficult to identify the actual causal agent. When the primary cause of death cannot be precisely determined, it is listed as unknown.

Table 42.--Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by cause of death and species in west-central Colorado, 1982

| Species | Cause of death | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Insects | Disease | Fire | Animal | Weather | Suppression | Logging | Unknown[1] | Total |
| | Thousand board feet, International ¼-inch rule | | | | | | | | |
| Lodgepole pine | -- | 1,602 | -- | 843 | 1,808 | -- | -- | 2,332 | 6,585 |
| Subalpine fir | 1,456 | 1,623 | -- | -- | -- | -- | -- | -- | 3,079 |
| White fir | 486 | -- | -- | -- | -- | -- | -- | -- | 486 |
| Total softwoods | 1,942 | 3,225 | -- | 843 | 1,808 | -- | -- | 2,332 | 10,150 |
| Aspen | -- | -- | -- | -- | 438 | -- | -- | 2,720 | 3,158 |
| Total hardwoods | -- | -- | -- | -- | 438 | -- | -- | 2,720 | 3,158 |
| All species | 1,942 | 3,225 | -- | 843 | 2,246 | -- | -- | 5,052 | 13,308 |

[1]Because many destructive agents often attack trees in concert or in succession, it is often difficult to identify the actual causal agent. When the primary cause of death cannot be precisely determined, it is listed as unknown.

Table 43.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by cause of death and species in west-central Colorado, 1982

| Species | Cause of death | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Insects | Disease | Fire | Animal | Weather | Suppression | Logging | Unknown[1] | Total |
| | - - - - - - - - - - - - - - - - Thousand board feet, Scribner rule - - - - - - - - - - - - - - - - | | | | | | | | |
| Lodgepole pine | -- | 1,370 | -- | 722 | 1,543 | -- | -- | 1,960 | 5,595 |
| Subalpine fir | 1,191 | 1,325 | -- | -- | -- | -- | -- | -- | 2,516 |
| White fir | 432 | -- | -- | -- | -- | -- | -- | -- | 432 |
| Total softwoods | 1,623 | 2,695 | -- | 722 | 1,543 | -- | -- | 1,960 | 8,543 |
| Aspen | -- | -- | -- | -- | 368 | -- | -- | 2,316 | 2,684 |
| Total hardwoods | -- | -- | -- | -- | 368 | -- | -- | 2,316 | 2,684 |
| All species | 1,623 | 2,695 | -- | 722 | 1,911 | -- | -- | 4,276 | 11,227 |

[1]Because many destructive agents often attack trees in concert or in succession, it is often difficult to identify the actual causal agent. When the primary cause of death cannot be precisely determined, it is listed as unknown.

Table 44.--Area of State and privately owned woodland by ownership class and forest type in west-central Colorado, 1983

| Forest type | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - - - Acres - - - - - - - - - - | | |
| Pinyon-juniper | 8,833 | 47,288 | 56,121 |
| Juniper | 1,016 | 10,569 | 11,585 |
| Total woodland softwoods | 9,849 | 57,857 | 67,706 |
| Oak | 15,468 | 133,413 | 148,881 |
| Total woodland hardwoods | 15,468 | 133,413 | 148,881 |
| All types | 25,317 | 191,270 | 216,587 |

Table 45.--Net volume of State and privately owned woodland by ownership class and species in west-central Colorado, 1983

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Aspen | 181 | 4,431 | 4,612 |
| Pinyon/juniper | 5,959 | 31,017 | 36,976 |
| Woodland hardwoods | 4,395 | 34,313 | 38,708 |
| All species | 10,535 | 69,761 | 80,296 |

Table 46.--Net annual growth of State and privately owned woodland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Aspen | 5 | 120 | 125 |
| Pinyon/juniper | 41 | 224 | 265 |
| Woodland hardwoods | 143 | 1,168 | 1,311 |
| All species | 189 | 1,512 | 1,701 |

Table 47.--Annual mortality of State and privately owned woodland by ownership class and species in west-central Colorado, 1982

| Species | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - Thousand cubic feet - - - - - - - | | |
| Aspen | ([1]) | 8 | 8 |
| Woodland hardwoods | 1 | 8 | 9 |
| All species | 1 | 16 | 17 |

[1]Less than 500 cubic feet.

Table 48.--Area of State and privately owned timberland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - - - - - - - Acres - - - - - - - - - - - - - - | | |
| Alamosa | 153 | 6,387 | 6,540 |
| Conejos | 12,133 | 18,590 | 30,723 |
| Eagle | 2,336 | 51,916 | 54,252 |
| Grand | 15,816 | 98,831 | 114,647 |
| Gunnison | 3,777 | 115,002 | 118,779 |
| Hinsdale | 708 | 13,099 | 13,807 |
| Jackson | 62,899 | 58,386 | 121,285 |
| Mineral | 423 | 13,164 | 13,587 |
| Pitkin | 56 | 27,197 | 27,253 |
| Rio Grande | 199 | 15,045 | 15,244 |
| Routt | 13,481 | 186,552 | 200,033 |
| Saguache | 2,886 | 45,036 | 47,922 |
| San Juan | 153 | 7,339 | 7,492 |
| Summit | 4 | 32,997 | 33,001 |
| Total | 115,024 | 689,541 | 804,565 |

Table 49.--Net volume of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Alamosa | 206 | 3,798 | 4,004 |
| Conejos | 26,815 | 28,257 | 55,072 |
| Eagle | 3,902 | 100,289 | 104,191 |
| Grand | 25,665 | 168,921 | 194,586 |
| Gunnison | 7,066 | 223,082 | 230,148 |
| Hinsdale | 1,526 | 26,129 | 27,655 |
| Jackson | 113,645 | 98,086 | 211,731 |
| Mineral | 1,053 | 27,755 | 28,808 |
| Pitkin | 17 | 54,053 | 54,070 |
| Rio Grande | 186 | 22,954 | 23,140 |
| Routt | 19,437 | 284,111 | 303,548 |
| Saguache | 4,353 | 68,265 | 72,618 |
| San Juan | 359 | 16,146 | 16,505 |
| Summit | 2 | 57,213 | 57,215 |
| Total | 204,232 | 1,179,059 | 1,383,291 |

Table 50.--Net volume of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - Thousand board feet, International ¼-inch rule - - | | |
| Alamosa | 588 | 10,344 | 10,932 |
| Conejos | 68,654 | 84,400 | 153,054 |
| Eagle | 8,533 | 232,261 | 240,794 |
| Grand | 59,924 | 441,056 | 500,980 |
| Gunnison | 19,160 | 532,238 | 551,398 |
| Hinsdale | 4,628 | 79,240 | 83,868 |
| Jackson | 303,201 | 226,357 | 529,558 |
| Mineral | 3,200 | 76,210 | 79,410 |
| Pitkin | 2 | 124,623 | 124,625 |
| Rio Grande | 596 | 67,728 | 68,324 |
| Routt | 42,135 | 606,738 | 648,873 |
| Saguache | 12,867 | 184,410 | 197,277 |
| San Juan | 574 | 47,515 | 48,089 |
| Summit | 4 | 147,128 | 147,132 |
| Total | 524,066 | 2,860,248 | 3,384,314 |

Table 51.--Net volume of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - Thousand board feet, Scribner rule - - - - - | | |
| Alamosa | 500 | 8,867 | 9,367 |
| Conejos | 58,216 | 71,784 | 130,000 |
| Eagle | 7,252 | 196,777 | 204,029 |
| Grand | 50,969 | 375,377 | 426,346 |
| Gunnison | 16,215 | 451,044 | 467,259 |
| Hinsdale | 3,915 | 67,138 | 71,053 |
| Jackson | 258,071 | 192,643 | 450,714 |
| Mineral | 2,708 | 64,587 | 67,295 |
| Pitkin | 2 | 105,789 | 105,791 |
| Rio Grande | 506 | 57,553 | 58,059 |
| Routt | 35,835 | 516,420 | 552,255 |
| Saguache | 10,899 | 156,332 | 167,231 |
| San Juan | 489 | 40,282 | 40,771 |
| Summit | 3 | 125,217 | 125,220 |
| Total | 445,580 | 2,429,810 | 2,875,390 |

Table 52.--Net annual growth of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Alamosa | 2 | 63 | 65 |
| Conejos | 451 | 417 | 868 |
| Eagle | 76 | 1,936 | 2,012 |
| Grand | 574 | 3,335 | 3,909 |
| Gunnison | 132 | 4,282 | 4,414 |
| Hinsdale | 24 | 421 | 445 |
| Jackson | 2,110 | 2,070 | 4,180 |
| Mineral | 15 | 464 | 479 |
| Pitkin | (1) | 978 | 978 |
| Rio Grande | 4 | 354 | 358 |
| Routt | 451 | 6,499 | 6,950 |
| Saguache | 86 | 1,314 | 1,400 |
| San Juan | 7 | 244 | 251 |
| Summit | (1) | 1,115 | 1,115 |
| Total | 3,932 | 23,492 | 27,424 |

[1]Less than 500 cubic feet.

Table 53.--Net annual growth of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - Thousand board feet, International ¼-inch rule - - | | |
| Alamosa | 7 | 143 | 150 |
| Conejos | 1,556 | 1,348 | 2,904 |
| Eagle | 293 | 5,293 | 5,586 |
| Grand | 2,111 | 15,422 | 17,533 |
| Gunnison | 412 | 13,541 | 13,953 |
| Hinsdale | 82 | 1,471 | 1,553 |
| Jackson | 10,774 | 7,804 | 18,578 |
| Mineral | 50 | 1,406 | 1,456 |
| Pitkin | (1) | 3,632 | 3,632 |
| Rio Grande | 16 | 1,101 | 1,117 |
| Routt | 1,732 | 23,040 | 24,772 |
| Saguache | 320 | 4,192 | 4,512 |
| San Juan | 35 | 864 | 899 |
| Summit | (1) | 6,618 | 6,618 |
| Total | 17,388 | 85,875 | 103,263 |

[1]Less than 500 board feet.

Table 54.--Net annual growth of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - Thousand board feet, Scribner rule - - - - - | | |
| Alamosa | 6 | 126 | 132 |
| Conejos | 1,322 | 1,148 | 2,470 |
| Eagle | 250 | 4,512 | 4,762 |
| Grand | 1,814 | 13,256 | 15,070 |
| Gunnison | 352 | 11,538 | 11,890 |
| Hinsdale | 70 | 1,243 | 1,313 |
| Jackson | 9,256 | 6,705 | 15,961 |
| Mineral | 42 | 1,185 | 1,227 |
| Pitkin | ([1]) | 3,095 | 3,095 |
| Rio Grande | 14 | 941 | 955 |
| Routt | 1,492 | 19,799 | 21,291 |
| Saguache | 271 | 3,573 | 3,844 |
| San Juan | 29 | 726 | 755 |
| Summit | ([1]) | 5,715 | 5,715 |
| Total | 14,918 | 73,562 | 88,480 |

[1]Less than 500 board feet.

Table 55.--Annual mortality of growing stock on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - Thousand cubic feet - - - - - - - - | | |
| Alamosa | 1 | 33 | 34 |
| Conejos | 125 | 117 | 242 |
| Eagle | 22 | 614 | 636 |
| Grand | 54 | 401 | 455 |
| Gunnison | 40 | 1,272 | 1,312 |
| Hinsdale | 8 | 105 | 113 |
| Jackson | 281 | 222 | 503 |
| Mineral | 5 | 122 | 127 |
| Pitkin | ([1]) | 281 | 281 |
| Rio Grande | 1 | 107 | 108 |
| Routt | 44 | 587 | 631 |
| Saguache | 20 | 388 | 408 |
| San Juan | 2 | 56 | 58 |
| Summit | ([1]) | 120 | 120 |
| Total | 603 | 4,425 | 5,028 |

[1]Less than 500 cubic feet.

Table 56.--Annual mortality of sawtimber (International ¼-inch rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - Thousand board feet, International ¼-inch rule - - | | |
| Alamosa | 3 | 47 | 50 |
| Conejos | 387 | 405 | 792 |
| Eagle | 41 | 1,836 | 1,877 |
| Grand | 125 | 1,106 | 1,231 |
| Gunnison | 109 | 3,443 | 3,552 |
| Hinsdale | 23 | 342 | 365 |
| Jackson | 805 | 459 | 1,264 |
| Mineral | 17 | 442 | 459 |
| Pitkin | -- | 679 | 679 |
| Rio Grande | -- | 345 | 345 |
| Routt | 76 | 1,097 | 1,173 |
| Saguache | 38 | 932 | 970 |
| San Juan | 3 | 214 | 217 |
| Summit | -- | 334 | 334 |
| Total | 1,627 | 11,681 | 13,308 |

Table 57.--Annual mortality of sawtimber (Scribner rule) on State and privately owned timberland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - Thousand board feet, Scribner rule - - - - - - | | |
| Alamosa | 2 | 39 | 41 |
| Conejos | 327 | 342 | 669 |
| Eagle | 35 | 1,543 | 1,578 |
| Grand | 106 | 930 | 1,036 |
| Gunnison | 92 | 2,903 | 2,995 |
| Hinsdale | 19 | 290 | 309 |
| Jackson | 677 | 386 | 1,063 |
| Mineral | 14 | 372 | 386 |
| Pitkin | -- | 575 | 575 |
| Rio Grande | -- | 291 | 291 |
| Routt | 65 | 933 | 998 |
| Saguache | 33 | 786 | 819 |
| San Juan | 2 | 181 | 183 |
| Summit | -- | 284 | 284 |
| Total | 1,372 | 9,855 | 11,227 |

Table 58.--Area of State and privately owned woodland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - - - - - Acres - - - - - - - - - - - - | | |
| Alamosa | 200 | 3,257 | 3,457 |
| Conejos | 2,994 | 2,983 | 5,977 |
| Eagle | 4,715 | 28,418 | 33,133 |
| Grand | 2,391 | 5,129 | 7,520 |
| Gunnison | 596 | 34,480 | 35,076 |
| Hinsdale | 110 | 1,476 | 1,586 |
| Jackson | 1,534 | 4,724 | 6,258 |
| Mineral | 46 | 822 | 868 |
| Pitkin | 375 | 18,398 | 18,773 |
| Rio Grande | 817 | 7,556 | 8,373 |
| Routt | 9,604 | 57,268 | 66,872 |
| Saguache | 1,888 | 23,820 | 25,708 |
| San Juan | 45 | 942 | 987 |
| Summit | 2 | 1,997 | 1,999 |
| Total | 25,317 | 191,270 | 216,587 |

Table 59.--Net volume of State and privately owned woodland by county and ownership class in west-central Colorado, 1983

| County | Ownership class | | Total |
|---|---|---|---|
| | State | Nonindustrial private | |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Alamosa | 110 | 1,319 | 1,429 |
| Conejos | 1,210 | 1,062 | 2,272 |
| Eagle | 2,155 | 12,631 | 14,786 |
| Grand | 1,401 | 2,352 | 3,753 |
| Gunnison | 138 | 7,286 | 7,424 |
| Hinsdale | 26 | 316 | 342 |
| Jackson | 923 | 1,311 | 2,234 |
| Mineral | 11 | 219 | 230 |
| Pitkin | 72 | 3,376 | 3,448 |
| Rio Grande | 545 | 4,243 | 4,788 |
| Routt | 2,859 | 22,332 | 25,191 |
| Saguache | 1,083 | 12,211 | 13,294 |
| San Juan | 2 | 158 | 160 |
| Summit | ([1]) | 945 | 945 |
| Total | 10,535 | 69,761 | 80,296 |

[1]Less than 500 cubic feet.

Table 60.--Net annual growth of State and privately owned woodland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Alamosa | 1 | 11 | 12 |
| Conejos | 18 | 14 | 32 |
| Eagle | 32 | 205 | 237 |
| Grand | 15 | 37 | 52 |
| Gunnison | 4 | 309 | 313 |
| Hinsdale | 1 | 11 | 12 |
| Jackson | 12 | 35 | 47 |
| Mineral | (1) | 8 | 8 |
| Pitkin | 4 | 175 | 179 |
| Rio Grande | 4 | 35 | 39 |
| Routt | 90 | 527 | 617 |
| Saguache | 8 | 119 | 127 |
| San Juan | (1) | 9 | 9 |
| Summit | (1) | 17 | 17 |
| Total | 189 | 1,512 | 1,701 |

[1]Less than 500 cubic feet.

Table 61.--Annual mortality of State and privately owned woodland by county and ownership class in west-central Colorado, 1982

| County | Ownership class | | |
|---|---|---|---|
| | State | Nonindustrial private | Total |
| | - - - - - - - - - Thousand cubic feet - - - - - - - - - | | |
| Alamosa | -- | (1) | (1) |
| Conejos | (1) | (1) | (1) |
| Eagle | (1) | 3 | 3 |
| Grand | (1) | (1) | (1) |
| Gunnison | (1) | 5 | 5 |
| Hinsdale | -- | (1) | (1) |
| Jackson | -- | (1) | (1) |
| Mineral | -- | 1 | 1 |
| Pitkin | (1) | 2 | 2 |
| Rio Grande | -- | (1) | (1) |
| Routt | 1 | 4 | 5 |
| Saguache | -- | 1 | 1 |
| San Juan | -- | (1) | (1) |
| Summit | -- | (1) | (1) |
| Total | 1 | 16 | 17 |

[1]Less than 500 cubic feet.

Conner, Roger C.; Brown, Susan S. 1987. West-central Colorado: forest statistics for State and private land, 1983. Resour. Bull. INT-44. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station 47 p.

Presents land area, timberland area, woodland area, timber inventory, and growth and mortality data for 14 counties in west-central Colorado. Information and statistical tables are based on Forest Survey data collected from 1982 and 1983 and cover State and private resources.

KEYWORDS: timberland, woodland, growing-stock volume, net annual growth, roundwood harvest, fuelwood harvest

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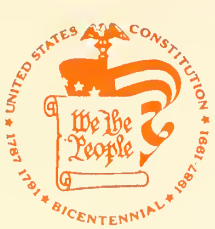
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